



Class RC 46

Book .N 6

Copyright N^o _____

COPYRIGHT DEPOSIT.

THE PRACTICE OF MEDICINE

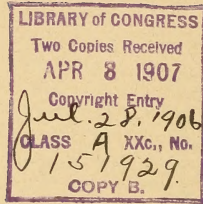
BY
A. M. NICKS, M. D.,
AUTHOR OF THE PRACTICE OF MEDICINE IN PLAIN ENGLISH, ETC., ETC.
AND
A. T. CHATHAM, M. D.



U
S
P
A
T
E
N
T
O
F
F
I
C
E

CHATHAM & NICKS, PUBLISHERS
CLARKTON, MISSOURI
1906

RC46
NG



COPYRIGHTED 1906
BY
CHATHAM & NICKS

PREFACE

The Authors have, each, practiced medicine more than an average professional life-time and have carefully studied the needs of families, and have used every effort to supply the public with a plain, reliable Practice of Medicine.

In a great majority of cases, the treatment recommended is that which the Authors, from experience, have found most beneficial.

The doses recommended in the body of the work, when not expressly stated otherwise, are for adults. (SEE TABLE OF DOSES, PART X.)

We acknowledge our indebtedness to J. W. Carr, A. M., Ph. D., of the Modern Language Department of the University of Arkansas for having carefully read our manuscript.

Without further comment the work is submitted to the public hoping that it will be the means of accomplishing much good.

September, 1906.

THE AUTHORS.

THE PRACTICE OF MEDICINE

PART ONE.

THE PRACTICE OF MEDICINE

PART I.

INTRODUCTION.

Disease is any variation from the standard of healthy function or structure.

Organic diseases are those that are associated with an organic change in the affected part.

Functional diseases are those in which there is no apparent structural change in the part.

A contagious disease is one whose causative agent is a specific poison that is capable of being communicated from the sick to the well by personal contact or close proximity.

An infectious disease is also due to a special cause that under certain conditions is capable of unlimited increase or multiplication. An infectious disease may or may not be contagious.

An abrupt termination of disease is called a crisis.

Lysis is a gradual return to health.

Pathology is that branch of medicine, which treats of the nature, causes, symptoms and results of disease.

The suffix *itis* added to the anatomical name of the part affected always denotes an inflammation, as tonsillitis, gastritis, enteritis, etc.

THE HYPODERMIC SYRINGE.

The advantages of the hypodermic syringe are, when patients are suffering with hemorrhage, severe pain, etc., the effects of medicines may be obtained in ten or fifteen minutes, which is a much shorter time than when medicines are given by the mouth; and, then, where the stomach is so irritable that nothing can be retained by it, remedies may be introduced into the system by this method.

See that your hypodermic syringe is kept scrupulously clean; keep a small wire in the needle when it is not in use; use clear, clean water, preferably that which has been recently boiled; and after the syringe has been filled with the solution to be used hold it in a vertical position, the needle upwards, and press the plunger slowly upward until all air is expelled from the instrument, which may be known by the liquid's escaping from the needle drop by drop; then, pinch up the skin, between the thumb and index finger, above the elbow on the back part of the arm, and insert the needle through the skin and slowly press the plunger until the syringe is emptied. Avoid puncturing a vein or an artery; and do not use any remedy, hypodermically, unless this, or some other standard work recommends its use by this method, as many agents, when used with the needle, produce violent sores.

Before undertaking to use the hypodermic syringe it would probably be advisable to get your family physician to instruct you in its use. Should he refuse to do so, he is too small to render you good service and we advise you to employ a broader-minded man.

TEMPERATURE.

The temperature of the human body, when in health is 98 2-5 degrees (Fahr.). Where the temperature is above this, the patient has fever; and where it is under this it is too low and stimulants should be given.

Each family should have a reliable fever-thermometer. Any physician or druggist will take pleasure in instructing you in its proper use.

THE PULSE.

The pulse of an adult male in health is about 70 per minute, while that of a female is about 80.

A good rule would be to count the pulse in each of the family, while in health, and keep a record of the same for future use.

The following, it is thought, will give the reader a very good idea of the pulse-rate from infancy to old age:

At birth,	130 to 140.
One month,	125 to 135.
One year,	115 to 130.
Two years,	100 to 115.
Three years,	95 to 100.
Seven years,	90 to 95.
Fourteen to eighteen,	80 to 90.
Adult male,	70 to 75.

Adult female, 75 to 80.

Old age, 60 to 70.

One degree of fever usually increases the pulse ten beats per minute, two degrees twenty and so on.

Suppose you know that the pulse of your sick child, when in health, is 90 and you examine and find that it is 100, what would be your conclusion? That the child had one degree of fever. Certainly. What if you were to examine the child again and find that its pulse is 110 per minute? You would conclude that it had two degrees of fever and your conclusion would usually be correct; however, we have no way of definitely determining the temperature except by the use of a thermometer, as, occasionally, we find a high fever without any increase in the pulse-rate.

Weakness, as well as excitement, quickens the pulse.

After the loss of considerable blood, and after exhausting sickness the pulse becomes very small and rapid. This, in such cases, is caused by weakness; and it is hoped that the reader will learn to distinguish a rapid, full pulse caused by fever from a rapid, feeble pulse, caused by weakness.

FEVER REMEDIES.

Remedies to control fever are selected by the condition of the pulse, therefore, a remedy that is used in one fever may be used, the pulse being similar, in all other fevers. A fever resulting from an inflammation, such as pneumonia, tonsillitis, dysentery, enteritis, nephritis, etc., is controlled exactly as we would a fever resulting from

malaria, smallpox, measles, whooping-cough or other causes.

In all fevers where the pulse is too quick, too full, and too strong, give Tr. of Veratrum Viride or Tr. of Aconite Root.

In all stomach and bowel troubles, and in diseases of children, where there is fever, Aconite should be used. In all other conditions Veratrum is the better remedy.

Prepare them for use as follows:

Tr. of Veratrum Viride, 18 drops,
Water, 18 teaspoonfuls.

Mix and give a teaspoonful of the mixture every one or two hours while there is fever, or:

Tr. of Aconite Root, 18 drops,
Water, 18 teaspoonfuls.

Mix and give a teaspoonful of the mixture every one or two hours.

In addition to the foregoing where the fever is high from 3 to 5 grains of Acetanilide may be given every three hours.

In all fevers where the heart's action (pulse) is weak or irregular give Digitalis, or Digitalis and Cactus, thus:

Fl. Ext. of Digitalis, 12 drops,
Fl. Ext. of Cactus Grand., 24 drops,
Water, 12 teaspoonfuls.

Mix and give a teaspoonful of the mixture every two hours while the pulse is weak or irregular.

Remember that Aconite, Veratrum, and Acetanilide are heart depressants—they weaken the pulse; and it is proper to use one or all of them, in all fevers where the

heart's action is too strong. Aconite has a tendency to quiet a sick stomach while Veratrum has a tendency to irritate it.

Do not use a sufficient amount of Acetanilide to cause profuse or continuous perspiration, as this is exhausting and is injurious.

Digitalis and Cactus are heart stimulants, and should be used in all fevers, or other troubles, where the heart's action is too weak.

In all fevers be sure to keep the head cool and the feet warm.

CONGESTION OF THE BRAIN.

There are two forms of congestion of the brain; the active and the passive.

All persons when they have fever are liable to have one or the other. Adults usually have the active, and children the passive; though, an adult may have the passive and a child may have the active.

The active congestion is a determination of blood to the brain—the brain is over-stimulated. In these cases, the patient is restless, the head hot, the face flushed and the pupils contracted or too small.

Wherever you see these symptoms, examine the pulse and if it is quick and full give one drop of the Tr. of Veratrum Viride and one and one-half drops of the Fluid Extract of Gelsemium every hour and a half, thus:

Tr. of Veratrum Viride,.....	18 drops,
Fl. Ext. of Gelsemium,.....	27 drops,
Water,.....	18 teaspoonfuls.

Mix and give a teaspoonful at a dose.

If the stomach is irritated, give Aconite instead of the Veratrum, as follows:

Tr. of Aconite Root,18 drops,
Fl. Ext. of Gelsemium,27 drops,
Water,18 teaspoonfuls.

Mix and give a teaspoonful of the mixture every hour and a half while there is fever.

Bromide of Potash is very useful in these cases. It may be added when used to the preparation of Veratrum and Gelsemium, thus:

Tr. of Veratrum Viride,18 drops,
Fl. Ext. of Gelsemium,27 drops,
Bromide of Potash,3 drachms,
Water,18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while there is fever. If the Gelsemium is used the Potash will rarely ever be needed, as the former is almost a specific in these cases.

In addition to the foregoing, if the fever is high, give from 3 to 5 grains of Acetanilide every two or three hours.

The passive congestion is a sluggishness of the hair-like blood vessels of the brain, with consequent venous fullness. There is not too much blood thrown to the brain, but it fails to get away from the brain as rapidly as it should. Blood which leaves the heart passes out through arteries and from the arteries through capillaries (hair-like blood vessels) into the veins and through the veins to the heart.

In the passive congestion the patient sleeps more than is natural, sleeps with the eyes partly open, often jerks or jumps in his sleep as if frightened; and the head is hot and the feet and hands are cool or cold. Belladonna is the remedy in this case. Examine the pulse, and if it is quick and strong give one drop of the Tr. of Aconite with one-third of a drop of the Fluid Extract of Belladonna, as:

Tr. Aconite Root, 18 drops,
 Fl. Ext. Belladonna, 6 drops,
 Water, 18 teaspoonfuls.

Mix and give a teaspoonful of the mixture every hour and a half while there is fever.

If the pulse is weak or irregular give Digitalis and Cactus instead of the Aconite, adding the Belladonna, thus:

Fl. Ext. of Digitalis, 18 drops,
 Fl. Ext. of Cactus Grandiflorus, ... 36 drops,
 Fl. Ext. of Belladonna, 6 drops,
 Water, 18 teaspoonfuls.

Mix and give a teaspoonful of the mixture every two hours.

Above all things keep the head cool and the feet warm in both of the foregoing conditions. If you use wet cloths, change them frequently. Do not allow them to become warm on the head. If necessary, in order to keep the head cool, pour cold water on it, as often as is necessary to accomplish the desired results, or use an ice bag for a pillow.

If the feet are cold bathe them in warm water and, then, wrap them up well with a blanket and apply hot irons, or other articles that will retain heat, to them, being careful, however, not to burn them.

Do not use Bromide of Potash or Gelsemium in passive congestion of the brain, as they are contra-indicated in this condition and are dangerous.

Do not use Belladonna in fevers unless the pupils (sight) are too large.

Never, under any circumstances, give Acetanilide or any form of Opium in passive congestion of the brain.

THE TONGUE.

A pale tongue, uniformly coated with a filthy, whitish coat shows that there is too much acid in the system and the condition demands a salt of soda. Sulphite of Soda is the remedy in this case. It may be given in 20-grain doses every three or four hours until the tongue becomes clean and normal in color.

Where the tongue and mucous membrane are too red, or red and dry, give Hydrochloric Acid. Two or three drops of it may be given, in a half a glass of water, every three or four hours until the color of the tongue and mucous membrane becomes natural.

Where the tongue and mucous membrane are purple or dark-red, whether there is or is not sordes on the lips and teeth give antiseptics, such as Naphthalin and the Fl. Ext. of Baptisia, or the following:

Tr. of Iodine,	1 drachm,
Carbolic Acid,	$\frac{1}{2}$ drachm,

Gum Arabic, $\frac{1}{2}$ drachm,
 Water,4 ounces.

Mix and give a teaspoonful, in a sup of water, every four or six hours.

Where there is an irritation of the stomach the tongue is usually elongated and pointed, the tip and edges red.

A yellow or yellowish coating on the tongue calls for a cathartic, which should be given in small doses, frequently repeated, in order to obtain its effects gradually. We know of no remedy, in these cases, that answers a better purpose than Calomel. It may be combined with Bicarbonate of Soda and powdered Ipecac, thus:

Calomel,1 grain,
 Bicarbonate of Soda,10 grains,
 Powd. Ipecac,1 grain.

Mix and divide into five powders and give one of them every hour until all are taken. Should they fail to act mildly on the bowels, within ten or twelve hours, give Salts, Oil, or a Seidlitz Powder

Calomel tablets containing 1-5 of a grain of the drug combined as in the foregoing, may be obtained at any first-class drug store.

A white coating on the tongue shows that the patient has, or has had, fever and nothing more. In these cases it would probably be advisable to give an ordinary dose of common Salts or a Seidlitz Powder.

If the bowels move too often, check them as you would in ordinary diarrhea. If they do not move often enough,

which should be at least once in twenty-four hours, use such remedies as Salts, Oil or a Seidlitz Powder.

If the patient passes too much urine check it with such remedies as Ergot and Rhus Aromatica; and should the flow be scanty increase it with the following:

Acetate of Potash,5 drachms,

Water,2 ounces.

Mix and give a teaspoonful, in a sup of water, every three or four hours until the desired effects are obtained.

Use cathartic medicines cautiously as they are very weakening.

PERIODIC DISEASES.

Any ache, pain or fever that comes on at a certain time, periodically, each day, may usually be cured with Quinine. The most successful method of using it in these conditions is to commence six and one-half hours before the expected occurrence of the ache, pain or fever, and give a number one capsule, well filled with the Sulphate of Quinine, every two hours until four are taken. Should it fail to relieve the patient on the first day try it on the second day and even the third.

Where there is severe pain apply salt as hot as it can be borne, to the painful parts.

If the pain is very severe $\frac{1}{4}$ of a grain of the Sulphate of Morphine may be given; and if relief is not obtained in forty-five or fifty minutes, the dose may be repeated; but do not administer the third dose under three or four hours, and not then, unless it is imperatively demanded.

Laudanum, Paregoric or Dover's Powder may be used instead of the Morphine for severe pain.

TONICS.

These remedies are to be used in any or all conditions where the patient is weakened or debilitated, especially after severe sickness. The following is a most excellent combination and will not only build up debilitated patients but will cure the majority of those who are suffering with indigestion:

Fl. Ext. of Nux Vomica,.....3 drachms,
 Fl. Ext. of Hydrastis Canadensis,..1 ounce,
 Fowler's Solution of Arsenic,...1½ drachms,
 Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful before each regular meal. If the patient has chronic constipation add a sufficient amount of the Fl. Ext. of Cascara Sagrada to each dose of the tonic. This will usually be from 10 to 30 drops.

If there is swelling of the feet and ankles omit the Arsenic and add 3 or 4 drops of the Fl. Ext. of Apocynum Cannabinum to each dose of the tonic.

If the whites of the eyes are yellow, add from 20 to 30 drops of the Fl. Ext. of Chionanthus Virginica to each dose of the tonic.

See Chronic Chills.

RECAPITULATION.

Normal temperature: 98 2-5.

Temperature above 98 2-5: Fever.

Temperature under 98 2-5, too low: Stimulants.

Fever, pulse too quick and too full: Aconite or Veratrum.

Stomach or bowel troubles with fever and a full pulse: Aconite.

High fever and full pulse: Acetanilide.

Flushed face, bright eyes, the pupils too small: Gelsemium.

Sleeping too much, the pupils too large: Belladonna.

Pulse weak or irregular: Digitalis or Digitalis and Cactus.

Tongue broad and pallid, uniformly coated with a filthy whitish coat: Sulphite of Soda.

Tongue elongated, tip and edges red: Stomach irritated.

Tongue red and dry: Hydrochloric Acid.

Tongue dark purplish: Antiseptic.

Tongue, yellowish coated: Cathartic.

Periodic diseases: Quinine.

Severe pain: Hot Applications.

Pain, very severe: Morphine, Laudanum, Paregoric, Dover's Powder.

PART II.

FEVERS.

Fever is a morbid condition of the system, characterized by a rise of temperature above 98 2-5, quickened pulse, marked tissue change, and disordered secretions.

The primary cause of fever is still an unsettled question. It is probably either a disorder of the sympathetic nervous system giving rise to disturbances of the vaso-motor filaments, or a morbid condition of the nervous centers adjacent to the corpus striatum, which by experiment, have been found to govern the process of heat production, distribution, and dissipation.

All fevers are either IDIOPATHIC or TRAUMATIC.

An idiopathic fever is one that arises as a primary disease, and not as a result of a local trouble, such as an inflammation or a wound.

A traumatic, or symptomatic fever, is one that arises as a secondary affection, such as the result of a wound or an inflammation.

All fevers are either STHENIC or ASTHENIC.

A sthenic, or active fever, is one in which there is a preternatural manifestation of vital energy and strength

of the heart's action, such as is seen, the first few days, in acute fevers and inflammations.

An asthenic fever is one in which there is a diminution of vital force, characterized by enfeebled action of the heart, etc., such as is seen in the latter stages of continued types of fevers.

All fevers are either INTERMITTENT, REMITTENT or CONTINUED.

An intermittent fever is one in which there are paroxysms of fever followed by intervals of apparent health such as common chills.

A remittent fever is one in which there is a temporary diminution or remission of the symptoms one or more times a day, such as is seen in bilious (?) fever.

A continued fever is one in which there is no well-marked remission, such as typhoid fever.

GENERAL TREATMENT OF FEVERS.

Control the temperature and the circulation.

The remedies recommended in Part I. will accomplish this very nicely.

"The cold bath or cold pack reduces temperature most decidedly, but entails much labor and is not altogether free from danger."—Hughes.

Do not undertake to reduce fever too rapidly as patients cannot bear the remedies, besides it is not beneficial; but rather undertake to control the circulation and temperature.

Keep the patient clean. This may be accomplished by sponging the entire body with tepid water once a day.

If the urine is scanty use diuretics; and if the bowels are constipated give laxatives.

Let fever patients have plenty of water, as it is beneficial in promoting the various secretions.

Let everything you do in all fevers, or other diseases, have a tendency to check, or bring back to a natural condition something that is varying from a normal condition. If you do more than this you will do harm and if you do less, you will fail to do your full duty.

Nourish the patient. Do not starve a fever. Administer milk, beef-tea, chicken-tea, and other light nutritious food, in small quantities, but at frequent intervals.

Examine the stools so that you may judge whether the food is being digested.

Attend to the nursing. Much of the success in the management of fever-patients can be attributed to good sensible nursing. Through nursing are secured the five essentials of every sick-room, to-wit: cleanliness, cheerfulness, regularity, ventilation and light.

INTERMITTENT FEVER.

MALARIAL FEVER; CHILLS AND FEVER; AGUE; SWAMP FEVER.

A non-contagious, infectious disease; characterized by a cold, a hot, and a sweating stage. The cold stage is frequently absent, or so mild that it can not be detected.

When the attacks occur every day it is called quotidian; when every other day, tertian and when occurring the first and fourth days quartan.

It is caused by the presence in the blood of the hæmatozoa of Laveran. This parasite, it is now believed,

is transmitted to man by certain species of mosquitoes (genus *Anopheles*) that have fed on the blood of some one affected with malaria.

SYMPTOMS: An attack usually begins with drowsiness and a disposition to yawn, and a feeling of chilliness, which, in severe cases, increases until it amounts to rigors with chattering of the teeth. The lips and finger-tips now have a bluish appearance, and if the skin is examined it will be noticed that it resembles that of a "picked goose." In some, there is vomiting, sometimes of bilious matter.

This condition usually lasts from a few minutes to one, two, or three hours and gives way to the hot stage, which commences with flushes of heat. The fever now rises rapidly, usually attaining 104 or 105, rarely 106 degrees. There is considerable thirst, pain in the back and limbs and severe headache. The pulse is full and bounding, the face flushed and the pupils contracted, indicating active congestion of the brain.

In other cases, the patient is drowsy, dozing, or sleeping a good deal of the time, the pupils being too large, indicating passive congestion of the brain.

Children not infrequently have spasms during the hot stage of intermittents.

This condition lasts from one, to sixteen or eighteen hours, and gives way to the sweating stage. It will be noticed that the hands and forehead are moist. The fever now subsides rapidly and the patient is soon covered with perspiration, and, with the exception of a feeling of

weakness, he is comparatively well until another paroxysm occurs.

TREATMENT: *Prophylaxis*. "The investigations cited above show that an individual ill of malaria is a source of danger in a community, and should be promptly treated. Localities that furnish breeding-places for the mosquito (*e. g.*, marshes) should be thoroughly drained. The homes and more particularly the sleeping-apartments, of persons residing in paludal regions, should be protected against invasion by mosquitoes."—Anders.

During the cold stage put the patient to bed and apply plenty of cover, and if this stage is very severe place hot rocks, hot bricks, or anything that is calculated to retain heat, around the patient and you may also give 10 or 15 drops of the Tr. of Camphor or a half- teaspoonful of the Aromatic Spirits of Ammonia, in a sup of water. This will bring about a reaction, however, there is seldom any treatment required in this stage of an ordinary intermittent.

When fever comes up, if there is a full bounding pulse, give one drop of the Tr. of Veratrum Viride every hour or every hour and a half. If there is flushed face, bright eyes, and contracted pupils, add $1\frac{1}{2}$ drops of the Fl. Ext. of Gelsemium to each dose of the Veratrum, thus:

Tr. of Veratrum Viride,.....18 drops,

Fl. Ext. of Gelsemium,.....27 drops,

Water,.....18 teaspoonfuls.

Mix and give a teaspoonful of the mixture at a dose.

If the stomach is irritated use Aconite instead of the

Veratrum; and if the patient is sleeping too much, the pupils being too large, add $\frac{1}{3}$ of a drop of the Fl. Ext. of Belladonna to each dose of the Aconite, as follows:

Tr. of Aconite Root,.....18 drops,
 Fl. Ext. of Belladonna,.....6 drops,
 Water,.....18 teaspoonfuls.

Mix and give a teaspoonful of the mixture every hour and a half or two hours while there is fever.

Instead of using the foregoing, especially where there is no passive congestion of the brain, you might give from 3 to 5 grains of Acetanilide every three or four hours while there is fever.

Where children are having spasms from congestion of the brain, give them the indicated fever drops every half-hour until they are relieved. At the same time keep the head cool. Pour cold water on it sufficiently often to accomplish the desired result. If the feet are cold bathe them in warm water, then, wrap them up well with a blanket and apply hot irons, bricks, or anything that will retain heat, to them. If the foregoing should fail to control the spasms, give a dose of Chloral Hydrate every half-hour until relief is obtained. The dose of Chloral is one grain for each year of age up to twenty. It should be given in strong mint-water.

If the tongue is coated with a yellowish coat give the following:

Calomel,.....1 grain,
 Bicarbonate of Soda,.....10 grains,
 Powd. Ipecac,.....1 grain.

Mix and divide into five powders and give one every hour until all are taken. Should they fail to act on the bowels, follow them with Salts, Oil or a Seidlitz Powder.

Instead of the Calomel mixture the Improved Compound Cathartic Pills may be used. The proper way to use them is to take one at night and if it does not act mildly on the bowels take another one the next morning. Do not use any cathartic medicine at all unless it is particularly indicated.

Commence six and one-half hours before the next, expected chill-time and give 5 grains of the Sulphate of Quinine every two hours until four doses are taken. The Quinine may be made more efficient and less disagreeable by the addition of one or two grains of Dover's Powder to each dose.

Where you do not know when to expect the chill, keep the patient under the influence of the Quinine until there is no probability of a paroxysm.

The following form of Quinine should be used with children, as it is tasteless:

Quinidine (Alkaloid),..... $1\frac{1}{4}$ drachm,

Simple Syrup,.....2 ounces.

Mix and remember that a teaspoonful of it contains 5 grains, the proper dose for an adult. Quinidine is said to be more efficient in malaria than Quinine (Potter). (See Chronic Chills.)

CHRONIC INTERMITTENT.

CHRONIC CHILLS; CHRONIC MALARIA; CHRONIC AGUE.

Chronic malaria is produced by the same causes that produce the acute variety of the disease and never occurs

except as a result of neglected or improperly treated cases of the acute form. After the condition has existed for some time the patient has a sallow appearance, the spleen enlarges, the abdomen bloated and the lips have a pale characteristic color.

Where an acute attack of chills has been broken and afterwards returns, it might for all practical purposes be classed as chronic. It would probably be well for us to add that in chronic malaria the attacks are frequently irregular, and, sometimes the spleen becomes enormously enlarged.

TREATMENT: Check the attacks with Quinine as you would in ordinary acute intermittents. If the patient is a child, use Quinidine instead of Quinine.

If particularly indicated use the following:

Calomel,.....	1 grain,
Bicarbonate of Soda,.....	10 grains,
Powd. Ipecac,.....	1 grain.

Mix and divide into five powders and give one every hour until all are taken. Should they fail to act mildly on the bowels give Salts, Oil or a Seidlitz Powder.

If preferred, Improved Compound Cathartic Pills may be used instead of the Calomel-mixture. Give one at night, and if it does not act mildly on the bowels by morning, give another one. Bear in mind that the disease cannot be cured by any kind of laxative or cathartic medicine. The patient must be built up.

After an experience extending over many years, in an intensely malarial region, we are prepared to state that the

following tonic when taken as directed, and treatment is used as herein given for complications that may be present, will never disappoint you:

- Quinidine (Alkaloid),.....3 drachms,
Fl. Ext. of Nux Vomica,.....3 drachms,
Fl. Ext. of Hydrastis Can.,.....1 ounce,
Fowler's Solution of Arsenic,....1½ drachms,
Simple Syrup, sufficient to make,....6 ounces.

Mix and give a teaspoonful before each regular meal.

If the feet and ankles are swollen, omit the Arsenic and add 3 drachms of the Fl. Ext. of Apocynum Cannabinum in its stead.

Occasionally, especially where patients have suffered with chronic malaria, more or less, for several months or even years, there may be no regular chills or fevers. In these cases, the skin and lips have a characteristic pale color; the stomach and abdomen are hard and larger than natural; the spleen and liver are enlarged; there is shortness of breath; and, in many cases, swelling of the feet and ankles. In such cases, it is necessary to use the foregoing tonic, together with the treatment recommended for the various complications, until the patient regains his usual health. This is, usually, from six weeks to six months.

If the patient's eyes are yellow, in addition to the foregoing tonic, give 30 drops of the Fl. Ext. of Chionanthus Virginica after each regular meal.

If the tongue is coated with a filthy, whitish, pasty coat give 20 grains of the Sulphite of Soda every four hours until it is clean.

If the tongue is redder than natural give 2 or 3 drops of Hydrochloric Acid, largely diluted with water every four hours until its color becomes normal.

If the bowels are constipated give a sufficient amount of the Fl. Ext. of Cascara Sagrada after each regular meal to regulate them.

It is not uncommon to find children whose stomachs are so delicate that it is impossible for them to take the tonic previously recommended. In such cases the following will usually be sufficient:

Quinidine (Alkaloid),.....1 drachm,
Colorless Fl. Ext. of Hydrastis Can., 3 drachms,
Fowler's Solution of Arsenic,..... $\frac{1}{2}$ drachm,
Simple Syrup, sufficient to make,.....2 ounces.

Mix. The dose for an adult is a teaspoonful before each regular meal, children in proportion to age.

Patients suffering with chronic malaria should have the most nutritious food that can be obtained and allowed to eat as much of it as they are able to digest.

HYPERTROPHY OF THE SPLEEN: Ague cake, or enlargement of the spleen is usually a result of chronic malaria, therefore, we will notice it in connection with chronic intermittent.

The spleen is sometimes enlarged to such an extent that it is difficult to pass the fingers under its outer border even in the right iliac region.

Reputable physicians have been known to diagnose such cases as abdominal dropsy. A few such cases have come under our observation.

TREATMENT: In addition to the treatment recommended for chronic malaria apply a Compound Tar Plaster (Irritating Plaster) over the region of the spleen, making it large enough to extend as far over the abdomen as the enlarged organ extends. Spread the material composing the plaster on thin, pliant leather or very thick cloth. The can containing it should be placed in a vessel of warm water until it is thoroughly softened, when, it may be easily spread, after which it should be applied to the body warm. Allow it to remain on the body until the region over which it is applied becomes so sore that it cannot be longer borne, when, it may be removed for a few days and applied again as before and thus continued until a complete cure is effected.

The following will answer in some cases instead of the Tar Plaster, but it is an inferior remedy:

Croton Oil,.....	$\frac{1}{2}$ ounce,
Olive Oil,.....	$\frac{1}{2}$ ounce.

Mix and apply over the region of the spleen each day with a feather until the parts become as sore as can be borne, when, the applications may be discontinued for a few days; when, it should be used as before and thus continued until a complete cure is effected.

In addition to the counter-irritant over the region of the spleen, give the following:

*Fl. Ext. of *Grindelia Squarrosa*, 3 ounces,
Fl. Ext. of *Polymnia Uvedalia*, 2 ounces,
Aromatic Elixir, sufficient to make, . . 6 ounces.

Mix and give a teaspoonful after each regular meal. If the *Grindelia Squarrosa* cannot be obtained, use the *Polymnia Uvedalia* without it.

Do not expect results at once, but continue the treatment, if necessary for months, and you will surely be rewarded by a permanent cure, and that without emigrating to the mountains to obtain it.

FLOATING SPLEEN: This condition is rarely seen, and if the spleen were not enlarged would probably never be detected. The organ appears to be attached at its base by a rather small pedicle and the dependent portion may be found knotted in almost any part of the abdominal cavity.

TREATMENT: This should be the same as that recommended for enlargement of the spleen.

CONGESTIVE INTERMITTENT.

CONGESTIVE CHILL; PERNICIOUS MALARIA.

This is a malignant, destructive form of intermittent fever; characterized by intense coldness of the surface of the body, cold breath, slow, feeble pulse and persistent thirst.

It is caused by the presence in the blood of the hæmatozoa of *Leveran*.

⁵ Do not allow your druggist to make you believe that *Grindelia* or *Grindelia Robusta* and *Grindelia Squarrosa* are the same thing, for they are not. The Fl. Ext. of *Grindelia Squarrosa* may be obtained from Lloyd Bros., Cincinnati, Ohio, and also from The William S. Merrill Chemical Co., of the same city.

SYMPTOMS: Frequently an attack is preceded by one or more ordinary chills; in others, the first chill is severe and alarming; the temperature of the surface greatly diminished; the skin pale and shrunken, sometimes covered with a clammy sweat; the tongue usually pale and clean, in some cases, coated with a white fur; and in severe cases, it is cold.

Vomiting is common; sometimes of blood or a bloody, watery fluid. The pulse is weak or irregular, sometimes slow. Breathing is difficult; and, in extremely severe cases, the breath is cold. In some, there is diarrhea, the discharges consisting of bloody water; in others, there is hæmorrhage from the kidneys.

After from three to five hours, reaction slowly takes place, when, the paroxysm is at an end.

High fever with severe congestion of the brain sometimes follows, though, this is rare; or the system failing to react the patient dies.

Unless prevented by treatment, at the same or an earlier hour the next day the chill returns and is more severe than the first one. Few people ever recover from the third one.

TREATMENT: As soon as the nature of the attack is discovered, put the patient to bed, cover him up well and give a tablespoonful of Whiskey, or a teaspoonful of the Aromatic Spirits of Ammonia, every hour, in $\frac{2}{3}$ of a tablespoonful of strong pepper-tea. If the Whiskey or Ammonia is not at hand give 20 drops of the Tr. of Camphor. The applications of hot rocks, hot bricks, hot irons, bottles filled

with hot water, etc., to the feet, limbs and body must not be neglected.

If the case is a very severe one, in addition to the remedies and the hot applications just mentioned, the patient should be wrapped with a blanket wrung out of hot water, which has had a sufficient quantity of Mustard and Pepper added to it to make it strongly stimulating, and 1-60 of a grain of the Sulphate of Atropine and 1-20 of a grain of the Sulphate of Strychnine should be given hypodermically.

As soon as a sense of warmth is felt in the stomach give 20 grains of Quinine every hour until there is complete reaction.

If fever comes up, control it as you would in simple intermittent.

After there is complete reaction established, the great object to be attained is to prevent a recurrence of the paroxysm. To accomplish this Quinine must be given in 10-grain doses every three hours until the expected chill-time has passed. After having prevented a recurrence of the chill, give the patient the tonic recommended for chronic chills until his former strength is regained.

REMITTENT FEVER.

MALARIAL FEVER; BILIOUS FEVER.

Remittent fever is an infectious non-contagious, paroxysmal disease with exacerbations and remissions, the temperature remaining above normal; characterized by a cold stage, not recurring after the first paroxysm; an intense hot stage, accompanied by severe pains in the head, back and limbs; more or less vomiting, followed by an

almost imperceptible sweating stage, which is not infrequently wanting.

It is caused by the presence in the blood of the hæmatoza of *Leveran* of the æstivo-autumnal variety, which is communicated to man by the mosquito.

SYMPTOMS: There is usually a feeling of drowsiness, with loss of appetite, and, in some cases, headache for two or three days before the attack. In rare instances, the first thing noticed is the chill, which resembles that of an ordinary intermittent. Fever soon follows, the temperature usually reaching 104 or 105 degrees, rarely 106. There is thirst, and, in many cases, vomiting, sometimes of bile. Restlessness with headache, pain in the back, and limbs is common.

The pulse is quickened and usually full and strong; the face flushed; the eyes bright and the pupils contracted, indicating active congestion of the brain. In other cases the pupils are too large, the patient dozing or sleeping a good deal of the time, probably with the eyes partly open, the head being hot and the feet and hands inclined to be cold, indicating passive congestion of the brain.

The tongue, in some cases, is coated with a yellowish fur; while in others, it is broad and pallid, the coating consisting of a dirty whitish material. There is still another class of cases, especially those bordering on a continued type of fever, in which the tongue is red and dry.

The fever, as a rule, lasts from eight to twenty-four hours and gradually goes down to 99 or 100, when the

patient feels considerably better, and the skin may become moist. This condition which is the remission, usually lasts from two to six hours, when, the hot stage returns, though, generally, minus the chill, and there are the same symptoms as on the previous day, which is in turn again followed by the remission. Thus the disease continues from five to eight days and terminates in convalescence.

In severe or badly treated cases, the fever not infrequently assumes a continued type, when, it is sometimes called typho-malarial fever, but erroneously. The symptoms of this are similar, minus the bowel trouble, to typhoid fever, which see.

TREATMENT: This should be commenced by the administration of the proper sedatives (fever-drops). Thus if the pulse is full and strong, and the stomach not irritated, give one drop of the Tr. of Veratrum, and if the face is flushed, the eyes bright and the pupils contracted, add one and one-half drops of the Fl. Ext. of Gelsemium to each dose of the Veratrum as follows:

Tr. Veratrum Viride,.....	18 drops,
Fl. Ext. of Gelsemium,.....	27 drops,
Water,.....	18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while there is fever. In addition to this 5 grains of Acetanilide may be given every three or four hours while the fever is high.

If the stomach is irritated, use Aconite instead of the Veratrum, adding the Gelsemium, if indicated. Or, if the

patient is drowsy, the pupils being too large, use Belladonna instead of the Gelsemium, as follows:

Tr. Aconite Root,.....18 drops,
 Fl. Ext. of Belladonna,.....6 drops,
 Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while there is fever.

Keep the head cool and the feet and hands warm.

If the tongue is coated with a yellowish fur, give the following:

Calomel,.....1 grain,
 Bicarbonate of Soda,.....10 grains,
 Powd. Ipecac,.....1 grain.

Mix and divide into five powders, and give one of them every hour until they are all taken. Should they fail to act on the bowels, give Salts, Oil or a Seidlitz Powder. The Calomel-preparation is very useful in quieting an irritated stomach. If preferred the Improved Compound Cathartic Pills may be used instead of the Calomel; however, not more than one of them should be given at a dose; but, if needed, it may also be followed by a laxative.

If the tongue is broad and pallid, the coating consisting of a dirty whitish, pasty material, give 20 grains of the Sulphite of Soda every four hours until the tongue becomes normal in appearance.

Where the tongue is of a deep-red color, give 3 drops of Hydrochloric Acid, largely diluted with water, every four hours until the tongue assumes its natural color.

Vomiting, when present, may usually be overcome by

the application of a mustard-draft over the region of the stomach and the administration of a Creosote Compound Tablet every hour. This tablet may be obtained of any first-class druggist. Should these means fail, treat the stomach as recommended in irritation of the stomach, which see.

As soon as the temperature is down to something near normal, give 5 grains of Quinine every hour and a half until the fever begins to rise, when it should be discontinued and the "fever drops" given as before until the fever gives way sufficiently to use the Quinine again.

If the kidneys fail to act as freely as they should give 20 grains of the Acetate of Potash every three or four hours, as is necessary.

Continue the treatment as directed until the fever finally gives way, when the Quinine should be given every four hours for a day or two, then, put the patient on the tonic recommended for chronic chills until the former health is regained.

Should the fever assume a continued type treat it as you would typhoid fever, which see.

MALARIAL HÆMATURIA.

THE YELLOW DISEASE.

An infectious, non-contagious, malignant, malarial fever; characterized by a chill, fever, nausea, vomiting, difficult breathing, intense yellowness and bloody urine.

Caused by the presence in the blood of the hæmatozoa of Laveran, usually of the Aestivo-Autumnal variety,

which gains entrance into the system by means of the infected mosquito.

SYMPTOMS: In the majority of instances the patient has suffered with chronic malaria for some time before the occurrence of the attack, which commences with a chill more or less severe in character. Fever either of an intermittent or remittent type follows, rarely reaching more than 103 or 105 degrees. There are more or less nausea and vomiting with severe pains in the region of the liver and kidneys. This condition continues a few hours when bloody urine is voided; and the patient suddenly turns extremely yellow, after which an intermission or a remission occurs with considerable abatement of the symptoms. Sooner or later a second paroxysm occurs, which is more severe than the first. Patients are sometimes very nervous and restless, again they are stupid or drowsy; the tongue is red and dry; sordes appear on the teeth and lips; the pulse becomes weak and irregular; the urine is suppressed; the breathing is difficult; and death soon closes the scene.

In other cases the urine becomes clear, the mouth moist, the tongue, lips and teeth clean, the yellowness disappears, and the patient is convalescent, but very much debilitated.

TREATMENT: The disease is easier prevented than cured. No case of malaria should be neglected or allowed to become chronic.

At the beginning of the attack give Calomel, thus:

Calomel,.....	1 grain,
Bicarbonate of Soda,.....	10 grains,
Powd. Ipecac,.....	1 grain.

Mix and divide into five powders and give one every hour until all are taken. Should they fail to act on the bowels give Salts, or a Seidlitz Powder.

Control the fever as you would in any other disease, however, as the stomach is very liable to be irritable it would probably be best to use Aconite instead of Veratrum in all cases where the pulse is too full and too strong. If the patient is restless, the face flushed, the eyes bright, and the pupils contracted, add Gelsemium to the Aconite, as follows:

Tr. of Aconite Root,.....	18 drops,
Ext. of Gelsemium.....	27 drops,
Water,.....	18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while there is fever.

If the fever is high 5 grains of Acetanilide may be given every three or four hours, however, its action must be closely watched and its use discontinued if it depresses the patient too much.

If the patient is drowsy, the pupils being too large, Belladonna should be used instead of the Gelsemium, thus:

Tr. of Aconite Root,.....	18 drops,
Fl. Ext. of Belladonna,.....	6 drops,
Water,.....	18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half.

If the pulse is weak and irregular use Digitalis and Cactus, as:

Fl. Ext. of Digitalis,.....	12 drops,
-----------------------------	-----------

Fl. Ext. of *Cactus Grandiflorus*, 24 drops,
 Water, 12 teaspoonfuls.

Mix and give a teaspoonful every two hours until the pulse becomes normal. If indicated, the *Belladonna* should be added to the *Digitalis*-mixture.

For the purpose of checking the hemorrhage and stimulating the liver use the following:

Fl. Ext. of *Ergot*, $5\frac{1}{3}$ drachms,
 Fl. Ext. of *Rhus Aromatica*, $5\frac{1}{3}$ drachms, .
 Fl. Ext. of *Chionanthus Virginica*, $5\frac{1}{3}$ drachms.

Mix and give a teaspoonful, in a sup of water, every four hours.

As soon as the intermission or remission occurs give 5 grains of the Alkaloid *Quinidine* every hour and a half. Should the fever remain down after four doses of the *Quinidine* have been taken give it every four hours. Should the fever rise after having commenced the administration of the *Quinidine* discontinue it until the temperature is something near normal again. If the *Quinidine* cannot be obtained use the Sulphate of *Quinine* in the same dose.

Where the breathing is difficult and the pulse weak 1-40 to 1-30 of a grain of the Nitrate of *Strychnine* should be given every three hours.

The Aromatic Spirits of *Ammonia* may be given, in connection with the *Strychnine* where the patient is greatly prostrated. It may be given in 30-drop doses every one or two hours.

If there is suppression or scantiness of urine use the following:

Acetate of Potash,.....5 drachms,

Water, sufficient to make,.....2 ounces.

Mix and give a teaspoonful in a sup of water, every three hours.

If there is vomiting give the patient a Creosote Compound Tablet every hour until relieved. Or, the following:

Subnitrate of Bismuth,.....1 drachm,

Oxalate of Cerium,.....20 grains.

Mix and divide into ten powders and give one of them in Mint-Water every hour until the stomach is quieted.

See irritation of the stomach.

Do not allow the bowels to become constipated during the attack.

Finally when convalescence is fully established give the tonic recommended for chronic chills until the patient's natural stage of health is regained.

FEBRICULA.

IRRITATIVE FEVER.

This is a fever of the continued type, very mild in character and rarely lasting longer than from three to five days. Those who are unacquainted with it are frequently led to believe that they have some grave disease, on account of the fever, which is exceedingly high.

It is especially a disease of childhood, however, adults are not exempt from it. Its most frequent causes are thought to be excesses in eating and drinking, exposure to the sun, excitement and the action of cold.

SYMPTOMS: The symptoms of febricula are those common to all fevers; the patient has a chill of longer or shorter

duration but usually of not much severity. Preceding the chill there will be observed, sometimes for a few days, that the child is dull and languid, cross, or that it sleeps more than usual. Following the chill the pulse increases in frequency as the temperature becomes higher; the secretions are checked and there is more or less excitement of the nervous system. The febrile reaction comes up rapidly and usually attains its greatest intensity in from two to four hours. It may continue to the termination of the disease as a continued fever, or it may be broken up into exacerbations and remissions.

The natural duration of the disease is from three to five days, the fever gradually declining during the last third of the time, and, finally, terminating by the establishment of free secretion. In some cases, during the progress of the disease, there is passive congestion of the brain. The patient sleeps too much, sleeps with the eyes partly open, the pupils being too large; the head hot and the feet and hands cool. Children may have convulsions.

In other cases, there is active congestion of the brain; the patient is restless; the face flushed, the eyes bright, and the pupils contracted.

TREATMENT: Control the fever. If the pulse is full and strong and the stomach not irritated give *Veratrum*, and, if there is active congestion of the brain, add *Gelsemium*, thus:

Tr. of <i>Veratrum Viride</i> ,.....	18 drops,
Fl. Ext. of <i>Gelsemium</i> ,.....	27 drops,
Water,.....	18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while there is fever.

If the stomach is irritated use Aconite, adding the Gelsemium; or if there is passive congestion of the brain use Belladonna, thus:

Tr. of Aconite Root,.....	18 drops,
Fl. Ext. of Belladonna,.....	6 drops,
Water,.....	18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half.

If the stomach is irritated, apply a Mustard-Plaster over its region and give a Creosote Compound Tablet every hour until relieved. See irritation of the stomach. If the bowels are constipated give Oil, Salts or a Seidlitz Powder.

Where patients are having convulsions give them the indicated "fever-drops" every half-hour until three or four doses are taken, or until they are relieved. Keep the head cool; pour cold water on it, if necessary, in order to accomplish the desired result. If the feet are cold, bathe them in hot water, then, after wrapping them up well with a blanket apply a hot iron to them.

Should these means fail to control the convulsions give Chloral Hydrate every half-hour. The dose of it is one grain for each year of age of the patient up to twenty.

Where the fever is high and the pulse strong Acetanilide may be used in this, as well as other fevers.

TYPHOID FEVER.

SLOW FEVER.

An acute infectious, non-contagious fever of an average duration of from three to four weeks; characterized by a

slow, insidious onset; bleeding from the nose; more or less stupor and delirium; red-tongue becoming dry, brown, and sometimes fissured; a tympanitic condition of the abdomen, diarrhoea; an eruption on the bowels; great prostration and a slow convalescence; a lesion of Peyer's patches, the mesenteric glands and the spleen.

The disease is caused by the bacillus of Eberth, which gains entrance into the system through contaminated water, milk or other food.

SYMPTOMS: The stage of incubation is usually of several days' duration, the symptoms being those of depression. The patient complaining of headache, dizziness, loss of appetite, disturbed sleep and muscular weakness, with, not infrequently, bleeding from the nose. This condition exists from a few days to two or three weeks and is usually followed by a chill or chilliness of variable duration, the patient being unable to designate the exact day when the symptoms first began.

In malarial districts the disease not infrequently begins abruptly with a chill or rigor, which is followed by high fever. In these cases, the fever is usually of a distinctly remittent type during the first few days, the temperature reaching $99\frac{1}{2}$ degrees during the early morning and running as high as 104 or 105 degrees during the evening. This condition usually continues from four to eight days, when, the malarial element of the disease gives way and there is, from this time on, a typical case of typhoid fever.

Where the disease is uncomplicated, from the initial chill the fever gradually rises day by day, the evening

temperature being a degree or two higher than that of the morning.

The tongue is now coated; its tip and edges red and, in some instances, appearing as if they were glazed. The pulse is quick, full and strong; the bowels are tympanitic and a gurgling sound may be elicited by deep pressure in the right iliac fossa (inside of the right hip bone). In some, in fact a majority, there is diarrhœa, while in others the bowels are constipated and remain so throughout the attack. About the seventh day a few reddish spots resembling flea-bites may appear upon the abdomen, chest, or back.

During the second week the foregoing symptoms are aggravated; the fever is continuous; the pulse quick and full; the abdomen tender and tympanitic; there is severe and persistent headache; often stupor and nocturnal delirium; more or less cough; irregular muscular contractions (*subsultus tendinum*), especially of the wrists; *sordes* appear upon the lips and teeth; the tongue becomes clean and more or less dry; diarrhœa continues and during this stage deafness sometimes develops and may continue into convalescence. The spleen increases in size and there may be disturbances in vision.

About the third week the fever becomes remittent, but the evening temperature continues as high as in the preceding week, the morning temperature becoming lower each day. The pulse is now usually weak and frequently irregular; and the patient is greatly emaciated. All other symptoms remain about the same until near the

close of the week, when there is a general improvement.

During the fourth week the temperature may be normal of mornings. In such cases the pulse becomes stronger and more regular; the diarrhœa ceases; the tongue becomes clean and moist; the appetite ravenous; and the patient passes into a slow convalescence.

Not infrequently the fever continues from six to ten or more weeks and the patient dies from weakness or finally recovers.

In severe cases during the second or third week the diarrhœa is usually troublesome; and there may be alarming or fatal intestinal hæmorrhage. The patient sometimes passes into a stupor from which it is difficult or impossible to arouse him; there are involuntary discharges from the kidneys and bowels; dark-colored sordes appear on the lips and teeth; the patient lies on the back with the mouth and eyes open; the pulse is very rapid, weak and irregular; and death shortly closes the scene.

Once in a great while a case is complicated with parotid abscess, which is a very grave complication.

Perforation of the bowel almost always terminates in peritonitis and death.

Of course, any case of typhoid fever may be complicated with pneumonia, bronchitis, nephritis, phlegmasia dolens, etc.

The principal pathological condition we have to deal with in typhoid fever is an inflammation, followed by ulceration of Peyer's glands in the small intestines and a general catarrhal condition of the large and small bowel.

TREATMENT: "The *reduction of temperature* is one of the most important indications in the majority of cases of typhoid fever. There is now no doubt that the former views regarding the amount of fever a patient could stand for one or two weeks are responsible for the high mortality in this disease. A temperature of 103° to 105° for a dozen days is dangerous and should be combatted."—Hughes.

If the pulse is quick, full and strong and the stomach not irritated give one drop of the Tr. of Veratrum Viride every hour and a half. If the stomach is irritated use Aconite instead of the Veratrum, and where there is active congestion of the brain add Gelsemium and where the nature of the attack is known Echinacea should be added to the sedative, thus:

Tr. of Veratrum Viride,.....	18 drops,
Fl. Ext. of Gelsemium,.....	27 drops,
Fl. Ext. of Echinacea,.....	6 drachms,
Water,.....	12 teaspoonfuls.

Mix and give a teaspoonful every hour and a half. Do not forget to use Aconite instead of the Veratrum if the stomach is irritable or the bowels loose, and where there is passive congestion of the brain Belladonna must be used instead of the Gelsemium, thus:

Tr. of Aconite Root,.....	18 drops,
Fl. Ext. of Belladonna,.....	6 drops,
Fl. Ext. of Echinacea,.....	6 drachms,
Water,.....	12 teaspoonfuls.

Mix and give a teaspoonful every hour and a half.

Keep the head cool and the feet warm. The former

may be accomplished by means of cloths wrung out of cold water and applied to the head, changing them frequently; and the latter, by bathing the feet in hot water and then wrapping them up and applying heat to them.

Where the pulse is quick and full and there are no indications of passive congestion of the brain from 3 to 5 grains of Acetanilide may be given every four hours while the fever is high.

At any time the pulse becomes weak or irregular discontinue the Veratrum or Aconite and give Digitalis and Cactus, adding the Echinacea, thus:

Fl. Ext. of Digitalis,.....	12 drops,
Fl. Ext. of Cactus Grandiflorus,.....	24 drops,
Fl. Ext. of Echinacea,.....	6 drachms,
Water,.....	6 teaspoonfuls.

Mix and give a teaspoonful every two hours. If there is passive congestion of the brain Belladonna should be added to the foregoing preparation.

At the commencement of the attack, if indicated, the following may be given:

Calomel,.....	1 grain,
Bicarbonate of Soda,.....	10 grains,
Powd. Ipecac,.....	1 grain.

Mix and divide into five powders and give one every hour. If they fail to act on the bowels give Salts, Oil or a Seidlitz Powder.

Throughout the attack see that the bowels act at least once in twenty-four hours. Oil is probably our best laxative in typhoid fever.

Should the abdomen become tympanitic relief may usually be obtained by moving the bowels rather freely.

As soon as it is determined that you have a case of typhoid fever to deal with put the patient on the following antiseptics, changing from one to another as the case seems to demand, taking into consideration, to some extent, the whim of the patient.

Carbolic Acid,	.....48 drops,
Tr. of Iodine,	.....96 drops,
Gum Arabic,	.....1 drachm,
Water,	.....6 ounces.

Mix and give a teaspoonful every four or six hours. In preparing this preparation first dissolve the Gum Arabic in water, then, add the other drugs.

Or:

Naphthalin,	.....30 grains,
Sugar of Milk,	.....30 grains.

Mix and divide into six powders and give one of them every four or six hours.

Or:

Spirits of Turpentine,	.....1 drachm,
Gum Arabic,	.....30 grains,
Water,	.....4 ounces.

Mix and give a teaspoonful every four or six hours.

Or, if the tongue is red and dry:

Hydrochloric Acid,	.....2 drachms,
Water,	.....6 ounces.

Mix and give a teaspoonful, in a sup of water, every three or four hours.

Salol, in doses of 5 grains in capsules, every four hours, is also a valuable antiseptic in these cases.

Baptisia Tinctoria is also a very valuable antiseptic in typhoid fever, one or two drops of the fluid extract of it may be added to each dose of Aconite or Digitalis mixtures.

If the patient is unable to sleep the following may be given:

Chloral Hydrate,..... $2\frac{1}{2}$ drachms,
Tr. of Peppermint,..... $\frac{1}{2}$ drachm,
Water,.....2 ounces.

Mix and give a teaspoonful, in a sup of water, every hour until the desired results are produced.

Attacks that commence with a chill followed by high fever, showing a malarial complication, should, until the malarial element of the disease is controlled, be treated with full doses of Quinine as in remittent; but after this is accomplished, Quinine is worse than useless, in fact it is harmful, as it produces severe nervousness, etc.

Where there is scantiness of urine Acetate of Potash may be given, thus:

Acetate of Potash,.....5 drachms,
Water,.....2 ounces.

Mix and give a teaspoonful, in a sup of water, every three or four hours. If the patient is taking Hydrochloric Acid, 20 or 30-drop doses of the Fl. Ext. of Buchu should be given instead of the Potash, which is incompatible with any of the strong Acids.

Where patients are unable to discharge the urine, the bladder must be relieved by the use of a catheter.

If the stomach is irritable, the patient vomiting, place a Mustard-Plaster over the region of the stomach and give a tablet of Creosote Compound every hour until relief is obtained. See Irritation of the Stomach.

Where there is diarrhoea, especially if there is more than four or five discharges from the bowels, in the course of twenty-four hours, give 10-grain doses of the Subnitrate of Bismuth after each discharge. Should this fail, try the following:

Subnitrate of Bismuth,.....1 drachm,
Powd. Bay Berry Bark,.....1 drachm,
Sulphocarbolate of Zinc,.....18 grains.

Mix and divide into six powders and give one every three or four hours as is necessary. The following is also very beneficial in these cases:

Subnitrate of Bismuth,.....1½ drachms,
Fl. Ext. of Bay Berry,.....4 drachms,
Paregoric, sufficient to make,.....2 ounces.

Mix and give a teaspoonful every three or four hours.

Hæmorrhage, when present, may usually be controlled, by the administration of half-teaspoonful doses of the Fl. Ext. of Ergot every half-hour or so as the occasion demands.

Where the pulse is weak, or weak and irregular, the 1-40 of a grain of the Nitrate of Strychnine should be given every three or four hours. It may be given in connection with the Digitalis and Cactus. If the patient becomes very

weak, the pulse being weak, irregular, or thready, from 20 to 30 drops of the Aromatic Spirits of ammonia may be given, in a sup of water, every two or three hours as the urgency of the case demands.

Where patients are nervous, delirious or stupid, the pulse being weak Whiskey or Brandy should be given. It may be used in the form of egg-nog, milk-punch or toddy. The quantity to be administered must be regulated by its effects, however, from six to twelve ounces is usually the proper amount to be administered during twenty-four hours.

Where the attack occurs during warm weather the patient's bed should be screened in order to prevent flies contaminating the food and drink of the attendants. The discharges from the kidneys and bowels should be disinfected with boiling water as soon as passed and then buried.

The patient's entire body should be sponged, a limb at a time, once a day, with tepid water, wiping perfectly dry, using sufficient friction to produce slight redness of the skin. The bedding must be changed once a day; and the sick-chamber kept scrupulously clean. Admit plenty of fresh air into the sick-room.

The diet must consist of liquid food, such as milk, chicken-tea, beef-tea, beef-essence, rice-water, etc., however, fruit juices may be admitted in small quantities, provided they have been strained, such as orange; and there are no objections to a thoroughly ripe banana when stripped of the peel and thoroughly crushed, and beaten

like an egg. Lemonade, strained, may be allowed throughout the attack.

Finally, when convalescence is fully established, put the patient on 3 drops of the Fl. Ext. of *Nux Vomica* and 10 drops of the Fl. Ext. of *Hydrastis Canadensis*, thus:

Fl. Ext. of *Nux Vomica*,.....3 drachms,

Fl. Ext. of *Hydrastis Canadensis*,...1 ounce,

Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful before each regular meal. If the feet or ankles are swollen, add 3 drops of the Fl. Ext. of *Apocynum Cannabinum* to each dose.

Do not allow solid food until ten days after the disappearance of fever.

It is thought the following from the Bulletin of the Missouri State Board of Health will be of interest to the reader:

COLD BATHS IN TYPHOID FEVER.

“There has been for some time a growing distrust of the value of the cold-bath treatment in typhoid fever. Why this opinion has not prevailed before, the writer cannot understand, for there are many practical objections to it. Besides, the benefits expected from them are often disappointing to those who observe the closets in such cases. We don’t wish to underrate the value of hydropathic measures in the management of this disease, for often they are invaluable, but to use the cold bath to the exclusion of all other medical treatment is in the writer’s opinion unwise. This opinion is based upon personal experience, and not upon recent literature touching upon this subject. Dr. John

McRae in *American Medicine* has recently published an article which throws a great deal of light upon the relative value of the cold bath and other methods of treatment. He gives a review of 717 cases of typhoid fever treated at the Montreal General Hospital during a period of five years; 439 of these cases received bath treatment, antipyretic medical treatment was given to 148 cases and sponging to 94 cases. It was supposed that the sponging was given to only the mild cases, and they have been excluded from this comparison. The method of cold bath was the same as that used by Brand. His antipyretic treatment consisted of five grains of salol and five grains of phenacetine every four hours. The mortality as given by Dr. McRae is as follows: With the bath treatment it was 10.9 per cent, with the antipyretic treatment it was 9.4 per cent. The complications seemed to be more frequent under the bath treatment. Hæmorrhage complications in these cases was 12.3 per cent.; 5.5 per cent. suffered from perforation and 15.2 from delirium. With the antipyretic treatment only 6 per cent. had hæmorrhage, 6.8 per cent. suffered with perforation and 14 per cent. with delirium. The author of these statistics also reports that neuritis was much more frequent after the baths. The series makes no marked indication of any form of treatment, save in the bath treatment there are more cases of hæmorrhage and neuritis, whereas, in the antipyretic treatment hæmorrhage is comparatively infrequent. It is of great practical interest to note the apparent value of this simple treatment which he styles antipyretic. Five years ago it would have been impos-

sible to have persuaded the medical profession to believe that this simple treatment of typhoid fever would be productive of a lower death-rate than the cold-bath treatment, but it is observed in medical literature quite often these days that it is, and that the Brand method is becoming less popular and other methods are considered superior. Of course, no very great importance can be placed upon the value of what Dr. McRae calls his antipyretic treatment. Five grains of phenacetine every four hours is a very slight antipyretic. The idea it demonstrates is, that if you leave a patient alone he will do better than if he is treated with a cold bath. The free use of salol in typhoid fever is by far the most rational treatment that has ever been used, but Dr. McRae's method of giving it does not suit the notions of the writer. Five grains of this drug every four hours will do a little good, but a very little. Fifteen grains every four hours is little enough to give in most cases. It is not uncommon in this part of the country to give twenty grains every three hours. This quantity given in powder has an antipyretic effect, besides, its satisfactory effect can at once be seen, it flattens the bowels, checks diarrhoea, cleans the tongue, lowers the temperature and stops delirium. It is unquestionably conservative to state that the mortality in typhoid fever-cases with the intelligent use of salol and proper feeding and careful nursing ought not to be over 5 per cent. We have no desire to depreciate the very great value of frequent sponging with ordinary water. They are often soothing and refreshing, but not so with the cold bath. They experience no feeling of relief or pleasure

after or during their use. If we were to devote more time and study to each individual case, its wants and needs, rather than follow without the slightest variation one method of treatment, we would save cases we now lose. Many physicians, I believe, overlook the importance of little things which have a decided bearing upon the future termination of their cases. The patient, when it is possible, should be humored. He may have diseased notions about things, and it may not be possible or wise to please him, but when you can comply with all of his wishes you are in a position to do the most for him. He may want his room darker or lighter, warmer or colder, it may be too crowded or too noisy, he may object to the odor of certain flowers or disinfectants, his attendants may not understand him, he may not appreciate their efforts, and, unless they are experts, discord prevails, and a fretted expression is on your patient's face. All of these things when combined have a very decidedly bad effect in most cases, and might be altogether the indirect cause of a man's death. These are only a few of the small things I can think of which should always be looked after and corrected in the management of typhoid cases."

YELLOW FEVER.

YELLOW JACK.

Yellow fever is an acute, highly infectious, non-contagious endemic and epidemic disease consisting of three stages; the febrile, the remission, and the collapse; characterized by violent fever, yellowness of the surface and "black vomit." It is a disease of warm climates, its true home

being in the tropics; the specific poison or bacillus producing it only existing with a high temperature and is destroyed by frost. The disease is usually seen during June, July, August, September and October. One attack confers immunity from a second.

It is caused by a specific poison or the bacillus icteroides, which gains entrance into the system through the bites of infected mosquitoes.

SYMPTOMS: An attack, though frequently preceded for one or more days by languor, loss of appetite, headache, pain in the back and limbs, is usually ushered in with a chill. High fever accompanied by restlessness, flushed face and redness of the eyes, follows. The pulse varies in different cases; in some it is quick, full and strong; in others, it is weak or irregular. The tongue is usually furred, the stomach irritable and in a majority of cases there is vomiting. Thirst is extreme; and the patient complains of severe pains in the head, back, stomach and large joints. As the disease advances soreness in the region of the stomach becomes a marked symptom. In from one to three days, not so long in severe cases, the temperature declines to 100 or 101 degrees, and all of the symptoms, except the soreness in the region of the stomach, subside and the skin becomes moist and frequently covered with perspiration. Convalescence may now occur, but more commonly this stage is followed, after from one to twelve hours, by the stage of collapse. At this, or an earlier period of the disease, yellowness of the skin makes its appearance, becoming more marked as the disease advances.

Weakness now becomes great; the pulse is weak and thready or weak and irregular; the tongue becomes brown or dark; the irritation of the stomach is extreme; and we soon have that characteristic symptom known as "black-vomit." Hæmorrhage may occur from different parts of the body, the patient soon becoming insensible. Delirium is common, and, in severe cases, there are involuntary discharges, convulsions and clammy sweats, death soon closing the scene.

In other cases, there is a reaction, fever coming up, which may assume a typhoid type and run about the same course as typhoid fever.

In all cases of yellow fever observe the following instructions: Place the patient in bed and do not allow him to assume the erect position under any circumstances; screen the bed with some material sufficiently fine to prevent mosquitoes from gaining access to the patient and thus obtaining the infectious germs or material and transmitting them to the attendants or others; disinfect the discharges, with boiling water, as soon as they are passed and then bury them. Keep the patient, his room and bedding, scrupulously clean. Admit an abundance of fresh air into the sick chamber and let the diet be light but nutritious.

TREATMENT: This should be commenced precisely as we would the treatment of any other fever. If the pulse is full and strong and the stomach not irritated give *Veratrum*. If the face is flushed, and the pupils contracted add *Gelsemium* as follows:

Tr. of Veratrum Viride,.....18 drops,
 Fl. Ext. of Gelsemium,.....27 drops,
 Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour or every hour and a half as the urgency of the case demands.

If the fever is high from 3 to 5 grains of Acetanilide may also be given every three or four hours.

If the stomach is irritated, which is usually the case, give Aconite, instead of the Veratrum, as follows:

Tr. of Aconite Root,.....18 drops,
 Fl. Ext. of Gelsemium,.....27 drops,
 Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour or every hour and a half.

If the patient is sleeping too much, sleeping with the eyes partly open, the pupils being too large, the feet and hands cool, give Belladonna instead of the Gelsemium, thus:

Tr. of Aconite Root,.....18 drops,
 Fl. Ext. of Belladonna,.....6 drops,
 Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour or every hour and a half.

If the pulse is weak and irregular give Digitalis and Cactus, and if there are indications of passive congestion of the brain add the Belladonna, thus:

Fl. Ext. of Digitalis,.....12 drops,
 Fl. Ext. of Cactus Grandiflorus,....24 drops,
 Fl. Ext. of Belladonna,.....6 drops,
 Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every two hours.

If particularly indicated at the commencement of the attack Calomel may be used, thus:

Calomel,1 grain,
Bicarbonate of Soda,.....10 grains,
Powd. Ipecac,.....1 grain.

Mix and divide into five powders and give one of them every hour. Should they fail to act mildly on the bowels give Oil, Salts or a Seidlitz Powder.

If the tongue is broad and pallid, uniformly coated with a whitish, pasty coat, give 20 grains of the Sulphite of Soda every three or four hours until the tongue becomes clean.

If the urine is scanty give 15 or 20 grains of the Acetate of Potash or a half-teaspoonful of the Fl. Ext of Buchu every three or four hours as is necessary to act on the kidneys.

If there is vomiting apply a Mustard-Plaster, or a cloth wet with the White Liniment, over the region of the stomach and give a Creosote Compound Tablet every hour.

The following is also highly recommended for vomiting in these cases:

Subnitrate of Bismuth,.....1 drachm,
Hydrochlorate of Cocaine,.....3 grains.

Mix and divide into six powders and give one every hour.

Small lumps of ice are also very beneficial in some cases.

If these means fail give $\frac{1}{4}$ of a grain of the Sulphate of Morphine hypodermically.

As soon as yellowness of the skin and eyes makes its appearance give the patient a half-teaspoonful of the Fl. Ext. of *Chionanthus Virginica* every four hours until every trace of the yellowness disappears.

When the "black-vomit," which is dark blood, makes its appearance, or where there is hæmorrhage from any other part of the body, give the Fl. Ext. of Ergot, in from 15 to 30-drop doses every half-hour or hour as the urgency of the case demands.

During the stage of collapse the extremities should be well wrapped with a blanket that has been dipped into hot Mustard-Water and then wrung out. Hot rocks, bricks, irons, etc., should also be applied to them.

Half-teaspoonful of the Aromatic Spirits of Ammonia may be given every half-hour or hour as the urgency of the case demands. If these means fail to bring about a reaction give from 1-24 to 1-16 of a grain of the Sulphate of Strychnine, hypodermically, every two or three hours. Whiskey may also be used freely in these cases.

If the system reacts, a secondary fever of a typhoid type may follow, which should be treated precisely as you would typhoid fever.

Finally when convalescence is fully established, put the patient on the following tonic until the former health is regained:

Fl. Ext. of *Nux Vomica*,..... 3 drachms,
Fl. Ext. of *Hydrastis Canadensis*,... 1 ounce,
Fowler's Solution of Arsenic,.... 1½ drachms,
Aromatic Elixir, sufficient to make,.. 6 ounces.

Mix and give a teaspoonful before each regular meal.

TYPHUS FEVER.

SHIP FEVER, JAIL FEVER, FAMINE FEVER.

Typhus fever is an acute infectious, highly contagious epidemic disease; characterized by sudden invasion, great exhaustion, violent delirium and a peculiar eruption, a sickening odor, favorable cases terminating by crisis about the fifteenth day.

It is caused by a special infecting germ, which is influenced by filth and over crowding. The poison may be transmitted by personal contact with the patient or by means of wearing apparel, furniture, etc.

SYMPTOMS: In some cases there are premonitory symptoms as weakness, headache and loss of appetite. In others the attack begins abruptly with a chill followed by violent fever, the temperature reaching 104 to 106 degrees or even higher in severe cases. The fever is continuous; the pulse full and bounding, the face flushed, the eyes bright and the pupils contracted. Delirium soon follows, the patient lying in a stupor half asleep much of the time. Toward the end of the first week, in most cases, the eruption appears all over the chest, abdomen and upper parts of the limbs. It has a coarse, red measly appearance, and does not disappear upon pressure. A sickening odor is usually present at this stage.

The bowels are constipated as a rule, throughout the attack.

On or before the beginning of the second week of the attack the prostration is extreme; twitching of the tendons of the wrists is common; the tongue is dry and of a dark-red color; the pulse is weak and irregular, and the urine scanty and high colored.

By the end of the second week the fever declines rapidly and convalescence is established, however, death may occur before the fifth day of the attack. The mortality varies in different epidemics from five to thirty-five per cent.

One attack usually gives immunity for life.

The most common complications are pneumonia, bronchitis, pleurisy and swelling of the parotid glands.

TREATMENT: The treatment may be commenced by the administration of Calomel, thus:

Calomel,.....	1 grain,
Bicarbonate of Soda,.....	10 grains,
Powd. Ipecac,.....	1 grain.

Mix and divide into five powders and give one every hour. Should they fail to act on the bowels give Salts, Oil or a Seidlitz Powder.

See that the bowels act each day from the beginning of the attack, for this purpose use Oil when necessary.

Control the fever with sedatives as you would in any other disease.

If the pulse is full and strong give one drop of the Tr. of Veratrum or the same amount of the Tr. of Aconite, and if the face is flushed, the eyes bright, and the pupils contracted, add Gelsemium, thus:

Tr. of Veratrum Viride,.....18 drops,
 Fl. Ext. of Gelsemium.....27 drops,
 Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half; and if the fever is high, in addition to this, give 5 grains of Acetanilide every three or four hours.

If the stomach is irritated Aconite must be used instead of the Veratrum, adding the Gelsemium, as follows:

Tr. of Aconite Root,.....18 drops,
 Fl. Ext. of Gelsemium,.....27 drops,
 Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half. Where the patient is sleeping too much, the pupils being too large Belladonna should be used instead of the Gelsemium, add six drops of the fluid extract of it to the Aconite mixture.

If the pulse is weak or irregular give Digitalis and Cactus, adding the Belladonna, if indicated; and if the tongue is dark-purplish add Baptisia Tinctoria and Echinacea, thus:

Fl. Ext of Digitalis,.....12 drops,
 Fl. Ext. of Cactus Grand.,.....24 drops,
 Fl. Ext. of Baptisia Tinctoria,.....24 drops,
 Fl. Ext. of Echinacea,.....6 drachms,
 Water,.....6 teaspoonfuls.

Mix and give a teaspoonful every two hours.

In some cases the tongue is broad and pallid, uniformly coated with a filthy, white coat. This condition demands 20-grain doses of the Sulphite of Soda every three or four hours.

In most cases the tongue is red and dry, sometimes dark or almost black. In these cases, 3 drops of the Hydrochloric Acid should be given every three hours. It must be largely diluted with water.

Where there is scantiness of urine give 15 or 20 grains of the Acetate of Potash every three or four hours, thus:

Acetate of Potash,.....5 drachms,
Water,2 ounces.

Mix and give a teaspoonful as directed. The Potash is incompatible with Hydrochloric Acid, therefore, if the patient is taking the latter, Buchu should be used. It may be given in 30-drop doses of the Fl. Ext. every three or four hours.

If the pulse becomes very weak, Aromatic Spirits of Ammonia and Whiskey may be used freely.

In cases of great weakness 1-40 of a grain of the Sulphate of Strychnine may be given every two or three hours. When necessary it may be given hypodermically.

Concentrated nourishment should be given from the beginning of the attack.

When the fever subsides give the following tonic:

Fl. Ext. of Nux Vomica,.....3 drachms,
Fl. Ext. of Hydrastis Can.,.....1 ounce,
Fl. Ext. of Gentian,.....3 ounces,
Aromatic Elixir, sufficient to make,. .6 ounces.

Mix and give a teaspoonful before each regular meal until the usual strength is regained.

MOUNTAIN FEVER.

MOUNTAIN SICKNESS.

This is a fever developed after ascent to very high altitudes; characterized by quickened pulse, difficult breathing, dizziness, and headache.

Its cause is the extreme elevation.

The "mountain fever" of the older writers is now very generally conceded to be typhoid fever.

SYMPTOMS: These are a rapid pulse, great difficulty in breathing, headache, dizziness, and, sometimes, nausea and vomiting with slight fever, the temperature rarely reaching more than 101 degrees. A general indisposition and a sense of exhaustion are experienced upon exertion of any kind. Hæmorrhage from the lungs sometimes occurs, though rarely.

TREATMENT: Require the patient to assume the recumbent position and administer a dose of Salts or a Seidlitz Powder.

Control the fever as you would in any other disease. If the pulse is full and strong give Veratrum or Aconite and if indicated add Gelsemium or Belladonna. If the pulse is weak give Digitalis and Cactus adding Belladonna if indicated.

ERUPTIVE FEVERS.

Each of the eruptive fevers is characterized by an eruption peculiar to itself and by which it may be distinguished from others of the same class.

SCARLATINA.

SCARLET FEVER.

Scarlet fever is an acute infectious, contagious disease, usually of childhood; characterized by sore throat, high fever, rapid pulse, a peculiar scarlet eruption, followed by a scaling off of the outer skin and frequently an inflammation of the kidneys.

It is caused by a specific poison, probably the diplococcus scarlatinæ. The disease is contagious from person to person and may be conveyed by clothing, books, toys, or other articles.

It may also be conveyed by the air though not for any great distance. It is a disease of childhood, few persons ever having it after the age of twenty. Unlike measles, the older the patient the milder the disease. It sometimes occurs as an epidemic. One attack usually confers immunity from the disease.

The disease is divided into three types; Scarlatina Simplex, Scarlatina Anginosa, and Scarlatina Maligna.

SYMPTOMS: In from one to eight days, more commonly two to four, after exposure, the attack is ushered in with a chill, vomiting and, in young children, convulsions. High fever follows, the temperature reaching 104 or 105 degrees. The pulse is full, quick and hard, ranging from 120 to 150. The tongue has a strawberry-like appearance, caused by the projections of red elevations through a whitish fur, but later becomes red.

In from twenty-four to thirty-six hours a bright scarlet rash appears, first on the neck and chest, soon spreading

over the entire body. Patches of the eruption, in various parts of the body, appear darker than that surrounding it. If the eruption be closely examined it will be found to consist of an infinite number of small, red points the rose colored ground being simply the base upon which they stand. Upon examination of the throat, about the time the eruption appears, it will be found red, inflamed and painful. There is difficulty in swallowing and the patient complains of burning heat of the surface of the body.

There is severe headache and in many cases diarrhoea.

About the fourth or fifth day the fever gradually declines; the eruption fades and on the sixth or eighth day desquamation (a peeling off of the outer or scarf skin) begins continuing from ten days to two or three weeks. The patient is pale and emaciated and gains strength very slowly.

In Scarlatina Anginosa, in addition to the foregoing symptoms, there is great inflammation and swelling of the throat, tonsils and surrounding glands, which causes difficulty in breathing and swallowing.

In Scarlatina Maligna, there is delirium, convulsions, twitching of the muscles, the pulse weak, rapid, and irregular; and the eruption is delayed and occurs in patches and is purplish in color. The temperature is exceedingly high, ranging from 107 to 110 degrees.

Scarlet fever is very liable to be followed by abscesses about the neck and throat; inflammation of the middle ear; suppurative inflammation of one or more of the

joints; and an acute inflammation of the kidneys resulting in dropsy.

The death-rate ranges from 5 to 10 per cent. in mild epidemics to 20 to 30 per cent. in the very severe. The younger the child the greater the danger.

TREATMENT: Control the fever. If the pulse is full and strong give Aconite or Veratrum and if there is flushed face, bright eyes and contracted pupils add Gelsemium, thus:

Tr. of Veratrum Viride,.....18 drops,
Fl. Ext. of Gelsemium,.....27 drops,
Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour or every hour and a half. If there is an inflamed condition of the throat, tonsils or other glands of the neck, Phytolacca Decandra should be added to the Veratrum, thus:

Tr. of Veratrum Viride,.....18 drops,
Fl. Ext. of Gelsemium,.....27 drops,
Fl. Ext. of Phytolacca Decandra,...18 drops,
Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour or every hour and a half.

If the stomach is irritated use Aconite instead of the Veratrum, adding the Gelsemium and Phytolacca. If indicated or if the patient is sleeping more than natural, the pupils being too large, use Belladonna instead of the Gelsemium, thus:

Tr. of Aconite Root,.....18 drops,
Fl. Ext. of Belladonna,.....6 drops,
Fl. Ext. of Phytolacca Decandra,...18 drops.

Mix and give a teaspoonful every hour or every hour and a half.

Where the fever is high, the skin hot and dry and no dilatation of the pupils 5 grains of Acetanilide may be given every three or four hours.

If the bowels are constipated and it is particularly indicated the following may be used:

Calomel,.....1 grain,
Bicarbonate of Soda,.....10 grains,
Powd. Ipecac,.....1 grain.

Mix and divide into five powders and give one every hour. Should they fail to act on the bowels give Oil, Salts or a Seidlitz Powder.

If the pulse is weak or irregular give Digitalis and Cactus, adding Belladonna if the patient is sleeping more than natural, the pupils being too large; and if the tongue and mucous membrane are dark-red or purple add Echinacea and Baptisia, thus:

Fl. Ext. of Digitalis,.....12 drops,
Fl. Ext. of Cactus Grandiflorus,....24 drops,
Fl. Ext. of Baptisia Tinctoria,....24 drops,
Fl. Ext. of Echinacea,.....6 drachms,
Water,.....6 teaspoonfuls.

Mix and give a teaspoonful every two hours.

Where the patient is having convulsions give the indicated sedative (fever drops) every half-hour until three or four doses are taken. Keep the head cool. Pour cold water on it, if necessary, to accomplish this. If the feet are cold bathe them in warm water, then wrap them with

a blanket and apply heat to them. Should these means fail give Chloral Hydrate every half-hour until relieved. The dose of it is one grain for each year of age up to twenty.

If there is scantiness of urine give the following:

Acetate of Potash,.....5 drachms,

Water, to make,.....2 ounces.

Mix and give a teaspoonful, in a sup of water, every three or four hours. The Fl. Ext. of Buchu, in 30-drop doses also answers a good purpose in these cases.

If the tongue is broad and pallid, the coating consisting of a dirty, whitish material, give 20 grains of the Sulphite of Soda every four hours until the tongue becomes clean.

Where the tongue and mucous membrane are too red, or red and dry, give 3 drops of Hydrochloric Acid, in a third of a glass of water, every three or four hours until the tongue assumes its natural color.

When the eruption appears much relief may be afforded the patient by the following:

Carbolic Acid,.....10 drops,

Vaseline,.....2 ounces.

Mix and anoint the entire body, except the head, with it twice a day.

To overcome the inflammation of the throat use the following:

Peroxide of Hydrogen,.....3 ounces,

Water,.....3 ounces.

Mix and apply to the throat, with an Atomizer, every hour or so.

The following may also be used in these cases:

Tr. of Iodine, 2 drachms,
 Glycerine, 4 drachms,
 Carbolic Acid, $\frac{1}{2}$ drachm,
 Simple Syrup, sufficient to make, ... 2 ounces.

Mix and use with a soft mop every three hours

In severe cases use the following:

Tr. of Muriate of Iron, 3 drachms,
 Glycerine, 5 drachms.

Mix and use with a soft mop every three or four hours.

Where the middle ear is inflamed it will be necessary to puncture the drum membrane, after which Powd. Boracic Acid should be blown into the ear with a powder blower or a quill.

Should dropsy occur give Digitalis and Apocynum, thus:

Fl. Ext. of Digitalis, $\frac{1}{2}$ drachm,
 Fl. Ext. of Apocynum Cannabinum, $1\frac{1}{2}$ drachms,
 Aromatic Elixir, sufficient to make, ... 4 ounces.

Mix and give a teaspoonful four times a day.

Where patients are slow in regaining their former health, give the following tonic:

Fl. Ext. of Nux Vomica, 3 drachms,
 Fl. Ext. of Hydrastis Can., 1 ounce,
 Fl. Ext. of Gentian, 3 ounces,
 Aromatic Elixir, sufficient to make, .6 ounces.

Mix and give a teaspoonful three times a day before meals until the former strength is regained.

RUBEOLA.

MEASLES.

Measles is an acute, contagious and epidemic disease; characterized by cough, fever and a dusky-red eruption, which terminates by desquamation.

It is caused by a specific poison, which is communicated by contact. One attack usually protects from a second though there are many exceptions to this rule. All ages are subject to it.

SYMPTOMS: From seven to fourteen days after exposure to its contagion there is a light chill followed by fever, quickened pulse, slightly furred tongue and in some cases vomiting. The early symptoms are those of a severe cold, such as increased secretion from the nose, cough, hoarseness and red watery eyes. There is usually pain in the head, back and limbs.

About the fourth day, sometimes sooner, the eruption makes its appearance, first, on the face, neck and breast, but soon extending to the rest of the body. By the fifth or sixth day the eruption reaches its height and begins to fade; first, on the face and neck, then, on the body and limbs. About this time or earlier, the fever subsides and there is soon a desquamation (or scaling off), but the cough may continue for some time.

In severe cases the fever is high, the eruption slow, sometimes ten or twelve days in making its appearance.

The most common complications are tonsillitis and pneumonia. It may be followed by scrofula or pulmonary tuberculosis, especially in those of a strumous diathesis.

TREATMENT: This should be commenced by the administration of the proper sedative ("fever-drops"). If the pulse is full and strong give Veratrum or Aconite and if there is flushed face, bright eyes and contracted pupils add Gelsemium, and if there is dry cough add Tr. of Lobelia, as follows:

Tr. of Veratrum Viride,18 drops,
Fl. Ext. of Gelsemium,27 drops,
Tr. of Lobelia,54 drops,
Water,18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while there is fever.

Where the stomach is irritated use Aconite instead of the Veratrum, adding the Lobelia; and if the patient is drowsy, the pupils being too large, add Belladonna instead of the Gelsemium, thus:

Tr. of Aconite Root,18 drops,
Fl. Ext. of Belladonna,6 drops,
Tr. of Lobelia,54 drops,
Water,18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while there is fever.

Keep the head cool and the feet warm. If there is a broad, pallid tongue, coated with a dirty, whitish coat, give 20 grains of the Sulphite of Soda every four hours until the tongue becomes clean or changes its color.

If the tongue is too red give 3 drops of Hydrochloric Acid, in a sup of water, every four hours until the tongue assumes its natural color.

If the bowels are constipated give Oil, Salts or a Seidlitz Powder.

If the urine is scanty give 20 grains of the Acetate of Potash, or 30 drops of the Fl. Ext. of Buchu every four hours.

Should diarrhea occur control it with the following:

Subnitrate of Bismuth,30 grains,

Powd. Myrica Crifera,30 grains,

Sulphocarbolate of Zinc,18 grains.

Mix and divide into six powders and give one of them every three or four hours as is necessary to check the bowels.

Give the patient plenty of cold water.

If the disease is complicated with tonsillitis or pneumonia treat it as such.

(See Tonsillitis, also Pneumonia.)

ROTHELN.

GERMAN MEASLES.

An acute contagious disease; characterized by slight fever, sore throat, enlargement of the glands of the neck and a rose-colored eruption.

It is propagated by contagion and is probably of microbic origin, though, its specific organism has not been isolated. One attack usually confers immunity against subsequent attacks. It may occur epidemically or sporadically.

SYMPTOMS: Usually from three to twelve days after exposure to its contagion the disease commences with slight fever, followed by soreness of the throat, dry cough, enlargement of the glands of the neck and in from one to three days the appearance of the eruption, which may be accom-

panied with a rise in the temperature to 103 degrees. In mild cases the first symptom noticed may be the rash, which first appears on the face and extends downwards over the body. It consists of slightly elevated, rose-colored spots, the size of a pin-head, which coalesce, forming patches. Within the first week the disease gradually subsides, the eruption fades, there is a slight desquamation and convalescence is fully established.

TREATMENT: Control the fever with sedatives ("fever-drops") as you would in any other disease; and if the bowels are constipated give Oil, Salts or a Seidlitz Powder.

The diet should consist of such articles as teas and soups.

VARIOLA.

SMALL-POX.

Small-pox is an acute, epidemic and highly contagious disease; characterized by severe chill, fever, intolerable pain in the head, back and limbs, followed by an eruption and a secondary fever.

It is caused by a specific poison, the nature of which is unknown, no specific germ having been fully demonstrated.

It is communicated by personal contact, clothing, etc. There is no time from the initial chill until the final desquamation when it is not contagious; though, the stage of suppuration is the most virulent.

"One attack, as a rule, protects from a second, though, even third attacks in the same individual occur."—Loomis.

It was brought to the United States from Europe in 1649 and gained its first foothold in Boston, Mass.

The disease is divided into three types; Discreet, Confluent and Malignant.

SYMPTOMS: From ten to fourteen days after exposure to the contagion the patient has a violent chill, lasting one, two or three hours, followed by fever, severe pain in the head, back and limbs. The pulse is full, strong and rapid; the tongue furred; and, in many cases, there is vomiting. At this time, adults are not infrequently delirious and children may have convulsions. At the end of the third day from the initial chill the characteristic eruption makes its appearance; first, on the forehead and lips, then, on the neck, arms, trunk and lower extremities. The eruption first consists of small red pimples resembling flea bites. These increase in size until about the eighth day, first containing a watery fluid, afterwards changing to a yellow matter. The eruption is grouped together in threes or fives, each one being surrounded by a red band. As the disease advances they become depressed in the center, but as their contents become purulent they assume a conical shape. The face becomes swollen, and, by the eleventh day of the disease, pus oozes from the pustules, and drying forms scabs, which drop off from the seventeenth to the twentieth day of the attack, leaving red pits which soon become white.

When suppuration is fully established there arises a secondary fever of longer or shorter duration and at this stage of the disease the patient has an offensive odor, which is characteristic.

In the confluent form of the disease, the symptoms are all worse, the eruption being thicker, forming, when suppuration occurs, almost a solid scab or shield.

In malignant small-pox all the symptoms are more aggravated and frequently patients die before the eruption makes its appearance.

During the secondary fever of small-pox there is liable to be severe complications, such as pneumonia, pleurisy and flux.

VARIOLOID: Is small-pox modified by vaccination. The symptoms of it are the same as the first named only it is very much milder, the eruption being very slight.

TREATMENT: Small-pox is a self-limited disease, therefore it is useless to try to abort an attack, but that it can be greatly modified there is no doubt. Where one has had an opportunity to contract the disease he should, at once, commence living on light diet, abandoning grease and meats; and keep his bowels slightly open with Sulphur.

Finally when the disease makes its appearance, and fever comes up, give sedatives according to indications. Where the pulse is full and strong give Veratrum or Aconite, and if the patient is restless, the face flushed and the pupils contracted, add, Gelsemium, thus:

Tr. Veratrum Viride,	.....18 drops,
Fl. Ext. of Gelsemium,	.....27 drops,
Water,	.....18 teaspoonfuls.

Mix and give a teaspoonful every hour or every hour and a half while there is fever.

If the stomach is irritated give Aconite instead of the Veratrum, adding the Gelsemium, if indicated, as in the foregoing; or if the patient is sleeping too much the pupils being too large add Belladonna, thus:

Tr. of Aconite Root, 18 drops,
Fl. Ext. of Belladonna, 6 drops,
Water, 18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half.

If the fever is high and the pupils not dilated give 5 grains of Acetanilide every three or four hours.

If the pulse is weak or irregular give Digitalis and Cactus, adding the Belladonna if indicated, as follows:

Fl. Ext. of Digitalis, 12 drops,
Fl. Ext. of Cactus Grandiflorus, 24 drops,
Fl. Ext. of Belladonna, 6 drops,
Water, 18 teaspoonfuls.

Mix and give a teaspoonful every two hours.

Where the tongue and mucous membrane has a dusky-red, or purplish appearance, Baptisia and Echinacea should be given. They may be added to the Digitalis and Cactus, thus:

Fl. Ext. of Digitalis, 12 drops,
Fl. Ext. of Cactus Grandiflorus, 24 drop,
Fl. Ext. of Baptisia Tinctoria, 24 drops,
Fl. Ext. of Echinacea, 6 drachms,
Water, 9 teaspoonfuls.

Mix and give a teaspoonful every two hours. At the same time, the patient should take 3 drops of Hydrochloric

Acid, in a sup of water, every four hours until the tongue assumes its natural color.

In some cases the tongue is broad and pallid, the coating consisting of a dirty, whitish, pasty material. This condition calls for the Sulphite of Soda. It may be given in 20-grain doses every four hours until the tongue becomes clean and assumes its natural color.

If the patient complains of general muscular soreness 6 drops of the Fl. Ext. of Cimicifuga may be given every four hours until the soreness is relieved.

Where patients complain of severe pain 10 grains of the Hydrate of Chloral may be given every half-hour until the pain is relieved to some extent. By adding the Tr. or Essence of Mint to the Chloral its taste may be disguised.

Keep the bowels slightly open throughout the attack. This may be accomplished by the administration of Oil, Salts or Seidlitz Powders occasionally as the case demands.

Where the tongue has a yellowish coating Calomel should be given, thus:

Calomel,.....	1 grain,
Bicarbonate of Soda,.....	10 grains,
Powd. Ipecac,.....	1 grain.

Mix and divide into five powders and give one every hour. If they do not act mildly on the bowels give Oil, Salts or a Seidlitz Powder.

Where the urine is scanty give 20 grains of the Acetate of Potash, or 30 drops of the Fl. Ext. of Buchu, every four

hours until it acts on the kidneys, then, continue its use sufficiently often to keep up its effects.

Keep the room dark but let the patient have plenty of fresh air. Remove all clothing, carpets, and bedding, from the room except that which is actually necessary for the comfort of the patient.

Keep the patient clean. Castile soap and water rightly used will accomplish this. Sprinkle Carbolic Acid over the room once or twice a day. Chloride of Lime kept in the room, in an open vessel, is also a good disinfectant.

If at any time the stomach becomes irritated give a Creosote Compound Tablet every hour. The following also answers an excellent purpose in these cases:

Subnitrate of Bismuth,.....1 drachm,
Hydrochlorate of Cocaine,.....3 grains.

Mix and divide into six powders and give one every hour until the stomach is relieved. At the same time a Mustard-Plaster may be applied over the region of the stomach.

Where convulsions occur, they should be controlled with the indicated "fever-drops," cold applications to the head, and if necessary, hot applications to the feet and the administration of the Hydrate of Chloral.

If the eruption appears in the mouth or throat let the patient hold small lumps of ice in the mouth and also wash the mouth and throat frequently with the following:

Chlorate of Potash,.....2 drachms,

Carbolic Acid,..... $\frac{1}{2}$ drachm,
 Water,.....6 ounces.

Mix.

In order to prevent pitting, which is very important, as soon as the pustules begin to discharge pus commence the use of the following:

Ichthyol,.....2 drachms,
 Olive Oil,.....4 ounces.

Mix and apply with a feather sufficiently often to prevent the remedy's becoming dry on the face. At the same time cover the face with black, oiled silk, which has had holes cut in it for the nose and mouth, and do not remove it from the face only when it is necessary to apply the Ichthyol and Oil. Continue to keep the room dark, allowing no light except that of a lamp or a candle.

After the secondary fever makes its appearance it will be necessary to support the patient's strength. For this purpose beef-tea, mutton-broth, chicken-tea, oysters, eggs and milk may be given. Where patients are very weak, Whiskey and Aromatic Spirits of Ammonia should be used freely.

Before allowing the patient to mingle with the outside world he should be given a thorough bath and be dressed, from head to foot, with clean clothing.

VACCINATION.

This is an inoculation with vaccine matter or cow-pox, bovine virus. Persons, who are properly vaccinated are, as a rule, protected from small-pox, especially severe or fatal attacks. Every person should be vaccinated at

least twice; first in infancy, and then, at twelve or sixteen years of age, although to be vaccinated each time the disease makes its appearance in the community would be a better plan.

To properly vaccinate a patient, scrape the skin until it is ready to bleed, then, apply the virus, which is previously moistened with water.

Another method is to make four or five horizontal, and as many transverse, cuts, applying the virus as in the method previously mentioned. To be successful very slight bleeding, if any, should occur.

The wound should be dressed with absorbent cotton held in place by adhesive strips.

About three days after the virus is applied, if it "takes," a papule appears and by the sixth day a vesicle, depressed in the center, has formed and by the eighth day a fully developed pustule, surrounded by a red areola, has formed; and by the fourteenth day a brown scab, which falls off by the twenty-third day, has formed.

Fever sometimes occurs during the course of vaccination.

It may be controlled with sedatives and laxatives.

VARICELLA.

CHICKEN-POX.

Varicella is an acute, contagious, febrile disease; characterized by slight fever and an eruption of vesicles on the skin.

It is a disease of childhood, rarely seen in adults, occurring as an epidemic, but sporadic cases of it occur. It may be

contracted by personal contact with one afflicted with it. As in small-pox, no specific germ has been satisfactorily isolated. One attack usually protects from a second.

SYMPTOMS: From fourteen to sixteen days after exposure to its contagion, slight fever, which may or may not be preceded by a chill or chilliness, occurs. There is a quickened pulse, loss of appetite, slightly furred tongue and more or less constipation of the bowels. The fever continues for twenty-four hours, when the eruption makes its appearance. It first appears on the body, rarely on the forehead and face. It first appears as slightly reddened and elevated pimples, which soon form vesicles (blisters) containing a clear fluid. These vesicles soon break, forming scabs, which, in the course of three to five days, fall off. A new crop frequently forms about the time, or after, the first is matured. About the time the vesicles are fully formed the skin appears as if it had been sprinkled with boiling water.

TREATMENT: Control the fever as you would in any other disease. If the bowels are constipated administer Salts or Oil. If there is considerable irritation of the skin use the following:

Ichthyol,.....1 drachm,

Olive Oil,.....2 ounces.

Mix and apply every two or three hours with a feather.

ERYSIPELAS.

ST. ANTHONY'S FIRE.

Erysipelas is an acute, specific, infectious, febrile disease; characterized by a more or less circumscribed inflammation

of the skin and subcutaneous tissue, high fever and moderate prostration.

The specific agent of the disease is the streptococcus erysipclatis of Fehleisen.

Erysipelas will not develop on a surface that does not present a break. This may be so trivial that it entirely escaped notice. Women, who have been recently delivered and those subjected to surgical operations are peculiarly liable to the disease.

The disease may be transmitted by clothing, surgical instruments and unclean hands. Physicians, or others, who have recently handled patients with erysipelas, should not, under any circumstances, attend or visit a woman during or for some days after her confinement. One attack predisposes to another.

SYMPTOMS: The first symptom noticed may be the inflammation of the skin, though more commonly an attack commences with a chill, or chilliness, which is followed by fever, quickened pulse, headache, furred tongue, constipated bowels and in many cases vomiting.

There is a burning sensation of the skin; where the eruption afterwards makes its appearance, and small red spots are soon seen and these increase in size until they coalesce. The skin soon becomes red and swollen, and there is a peculiar, burning, tingling, sensation in the part, which is very painful.

When the disease attacks the face and more especially when the eyelids are involved there is great swelling; and when the eruption is on the scalp there is, sometimes,

delirium. If the covering of the brain is involved there is convulsions, which may end in death. It may leave one part of the body and attack another, or it may extend over the entire body, although either of these results is of rare occurrence. There are, in some cases, blisters containing a clear watery fluid formed on the inflamed surface, and these break leaving a brownish surface. In the course of six or eight days the eruption begins to fade, leaving a rough wrinkled surface, which finally desquamates.

The throat is sometimes involved. In these cases, there is great danger from the swelling, which interferes with breathing.

Where erysipelas attacks a wound we have the same symptoms as in the so-called idiopathic variety of the disease except the attack is more severe.

The fever sometimes assumes a low typhoid or continued type. In these cases the tongue is of a dark-red or purplish color, sordes appear on the lips and teeth and diarrhoea follows. The disease is not infrequently complicated with pneumonia, pleurisy and meningitis.

TREATMENT: Control the fever with Aconite or Veratrum as you would in any other disease. If the patient is restless, the pupils being too small, add Gelsemium, or if the patient is drowsy, sleeping too much, the pupils being too large, use Belladonna instead of the Gelsemium.

If the fever is high, the skin dry and the pupils not dilated give 5 grains of Acetanilide every four hours.

If there is a yellowish coating on the tongue give the following:

Calomel,1 grain,
 Bicarbonate of Soda,10 grains,
 Powd. Ipecac,1 grain.

Mix and divide into five powders and give one of them every hour. Should they fail to act on the bowels give Oil, Salts or a Seidlitz Powder. If preferred one or two Improved Compound Cathartic Pills may be used instead of the Calomel.

Give 20 drops of the Tr: of Muriate of Iron, every three or four hours after the cathartic has acted. It should be given largely diluted with water and through a quill in order to preserve the teeth.

As a local application the following is excellent:

Oil of Cade (Younkin's),2 ounces,
 Olive Oil,2 ounces.

Mix and apply with a feather every two or three hours.

The following is also first class:

Gum Camphor,1 ounce,
 Carbolic Acid,1 ounce,
 Alcohol, $\frac{1}{2}$ ounce,
 Glycerine, $\frac{1}{2}$ ounce,
 Olive Oil,3 ounces.

Mix and apply with a feather every three hours.

If the fever is of a remittent type use Quinine as directed in remittent fever.

If there is scantiness of urine give 30 drops of the Fl. Ext. of Buchu every three hours until it acts on the kidneys.

Where a wound is complicated with erysipelas it should be thoroughly cleansed with Peroxide of Hydrogen, after which it should be washed with a 1-4000 solution of Bichloride of Mercury and then dressed with the Camphor and Carbolic Acid preparation previously recommended as a local application. The wound should be dressed sufficiently often to insure cleanliness.

Should convulsions occur give the "fever-drops" every half-hour until four or five doses are taken; keep the head cool and the feet warm and give 10 grains of Chloral every half-hour until relieved.

Where the fever assumes a typhoid type, the pulse being weak or irregular Digitalis and Cactus should be given; and if the tongue or mucous membrane are dusky or dark purplish, Baptisia and Echinacea should be added as follows:

Fl. Ext. of Digitalis,	12 drops,
Fl. Ext. of Cactus Grandiflorus, ...	24 drops,
Fl. Ext. of Baptisia Tinctoria,	24 drops,
Fl. Ext. of Echinacea,	3 drachms,
Water,	9 teaspoonfuls.

Mix and give a teaspoonful every two hours. If the pulse is very weak 1-40 to 1-30 of a grain of the Sulphate of Strychnine may also be given every three or four hours. Whiskey should also be given rather freely in these cases. The proper amount of it is from 8 to 12

ounces during each twenty-four hours. It would probably be best to give it in the form of Milk-punch or Egg-nogg.

Where patients are unable to sleep give Chloral, thus:

Hydrate of Chloral, $2\frac{1}{2}$ drachms,

Tr. of Peppermint, 15 drops,

Water, 2 ounces.

Mix and give a teaspoonful every half-hour, in a sup of water, until the desired effects are obtained or until four doses are taken.

If abscesses form empty them by free incisions and wash out their cavities with Peroxide of Hydrogen and dress with the dressing recommended for wounds.

See that the bowels act at least once or twice a day throughout the attack.

The patient's diet should be nutritious but easy to digest.

When convalescence is established put the patient on the following tonic:

Fl. Ext. of Nux Vomica, 3 drachms,

Fl. Ext. of Hydrastis Canadensis, ... 1 ounce,

Aromatic Elixir, sufficient to make, .6 ounces.

Mix and give a teaspoonful before each regular meal.

DENGUE.

BREAK-BONE FEVER.

Dengue is an acute, infectious, epidemic disease of tropical and sub-tropical regions; characterized by sudden onset, high fever, intense headache, severe pain in the joints and muscles and an eruption followed by a remission,

a second paroxysm and an eruption differing from the first one. Most observers regard the disease as contagious. Patients have been known to have as many as three attacks during the same epidemic.

The cause of it is unknown, however McLaughlin, of Texas, claims to have isolated its specific micrococcus.

SYMPTOMS: An attack commences suddenly with a chill, followed by high fever, intense headache, severe pain and swelling of the joints, soreness and stiffness of the muscles. The pulse is rapid, the tongue furred, and the bowels constipated; and there may be vomiting. The rash, which resembles that of scarlet fever, soon appears. In the course of from a few hours to two or three days the fever subsides, but the pain and soreness does not entirely disappear.

In from one to three days the fever and pain return but not so severe as in the first paroxysm, although the patient is considerably debilitated. From the fifth to the seventh day, from the beginning of the attack, the second eruption makes its appearance and is attended by intense itching. After one or two days desquamation occurs and the patient slowly recovers. Relapses are not uncommon.

TREATMENT: Control the fever as you would in any other disease. If the pulse is full and strong give *Veratrum* or *Aconite*; and if there is flushed face, bright eyes, and contracted pupils, add *Gelsemium*, and where there is muscular soreness *Cimicifuga* should also be added, thus:

Tr. of *Veratrum Viride*, 18 drops,

Fl. Ext. of *Gelsemium*, 27 drops,

Fl. Ext. of Cimicifuga,36 drops,
 Water,18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half. If the stomach is irritated give Aconite instead of the Veratrum, and if the pupils are too large, Belladonna should be used, thus:

Tr. of Aconite Root,18 drops,
 Fl. Ext. of Belladonna,6 drops,
 Fl. Ext. of Cimicifuga,36 drops,
 Water,18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half.

If the bowels are constipated give Oil, Salts or a Seidlitz Powder, or, if particularly indicated, give the following:

Calomel,1 grain,
 Bicarbonate of Soda,10 grains,
 Powd. Ipecac,1 grain.

Mix and divide into five powders and give one every hour.

If the urine is scanty give 15 grains of the Acetate of Potash every three or four hours.

For the pain in the joints give 10 grains of the Salicylate of Soda, made from the Oil of Winter-Green, every three hours until it relieves the pain in the joints or until the pain in the head becomes more severe. Where the pain is unbearable $\frac{1}{4}$ of a grain of the Sulphate of Morphine, or 10 grains of Dover's Powder, may be given and repeated as its effects pass off.

When convalescence is established the following tonic should be given:

Fl. Ext. of Nux Vomica,.....3 drachms,

Fl. Ext. of Hydrastis Canadensis,....1 ounce,

Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful before each regular meal.

PAROTITIS.

MUMPS.

A specific, infectious inflammation of the parotid and, sometimes, other salivary glands, with a tendency to migrate into the breasts of females and the testicles of males; characterized by fever, dryness of the mouth, pain and swelling of the glands involved. One attack usually gives immunity for life.

It is propagated by contagion. It is believed to be of microbic origin but the specific organism has not been isolated.

SYMPTOMS: From ten to twenty days after exposure to its contagion the patient has a chill, which is followed by fever, quickened pulse, headache, furred tongue, dry skin and constipated bowels. In many cases the chill is absent and the fever very slight. The glands soon swell and become painful, the jaws stiff, the mouth dry; and the tasting of sour substances at this time produces more or less pain. The fever and swelling subside and by the end of the first week the patient is convalescent, or the breasts or ovaries of females, and the testicles of males, become affected and the case is protracted.

Where the testicles are involved there is great swelling and the pain is exceedingly severe. This condition lasts a variable length of time and may be followed by atrophy

of the testicles. The disease may be followed, though very rarely, by an inflammation of the middle-ear.

TREATMENT: This should be commenced by the administration of Oil, Salts or a Seidlitz Powder and the proper sedative with the addition of *Phytolacca Decandra* (Poke Root).

If there is fever with a quick, full pulse, give *Veratrum* or *Aconite* and if there is flushed face, bright eyes and contracted pupils add *Gelsemium*, thus:

Tr. of <i>Veratrum Viride</i> ,.....	18 drops,
Fl. Ext. of <i>Gelsemium</i> ,.....	27 drops,
Fl. Ext. of <i>Phytolacca Decandra</i> ,...	18 drops,
Water,.....	18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while there is fever.

If the stomach is irritated use *Aconite* instead of the *Veratrum*; and if indicated, add the *Gelsemium*; or if the patient is sleeping too much, the pupils being too large, add *Belladonna*, thus:

Tr. of <i>Aconite Root</i> ,.....	18 drops,
Fl. Ext. of <i>Belladonna</i> ,.....	6 drops,
Fl. Ext. of <i>Phytolacca Decandra</i> ,...	18 drops,
Water,.....	18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while there is fever.

Where the fever is mild the *Aconite* and *Phytolacca* are the only remedies that are required. They may be administered every one, two, or three hours as the urgency of the case demands.

The swollen part, and the breasts when affected, should be bathed with the following:

Tr. of Veratrum Viride, $5\frac{1}{3}$ drachms,
 Tr. of Arnica, $5\frac{1}{3}$ drachms,
 Fl.Ext. of Phytolacca Decandra, $5\frac{1}{3}$ drachms.

Mix and apply with a feather every three hours; and, at the same time, take Phytolacca internally. Hot applications may also be used. If the testicles are involved the patient must wear a suspensory bandage. Where pain is very severe $\frac{1}{4}$ -grain doses of Morphine may be used for its relief.

EPIDEMIC CEREBRO-SPINAL MENINGITIS.

SPOTTED FEVER.

A malignant, infectious, epidemic disease; characterized anatomically, by an inflammation of the membranes (meninges) covering the brain and spinal cord, and, clinically, by intense headache, pain in the back and upper part of the spine with painful contractions of the muscles of the back of the neck, retraction of the head, delirium, stupor, coma and frequently the appearance of purpuric spots. It occurs more frequently during the winter months and has a predilection for the young. It usually occurs as an epidemic but sporadic cases of it are seen.

The disease is one of the most fatal that we are called on to treat; from fifty to seventy-five per cent. or more, of those attacked die, death usually occurring in three or four hours to as many days. During an epidemic through which the writer passed patients were frequently found

dead or dying upon his first visit to them. It is not contagious.

It is caused by the *diplococcus meningitidis*. Bad hygienic surroundings seem to predispose to it.

SYMPTOMS: In young children an attack may be ushered in with convulsions, but in others it usually commences with a chill, which is often severe. Moderate fever, quickened pulse, intense pain in the head extending to the back of the neck and spine, and frequently vomiting soon follow. There are painful contractions of the muscles of the neck and spine; the head is drawn backward and movements of the body increase the pain. The patient soon becomes delirious, in some cases passes into a stupor or deep coma from which it is difficult, or impossible, to arouse him.

The bowels usually remain natural or are constipated throughout the attack, and the kidneys usually act less than normal.

The fever may rise to 104 or 105 degrees, but soon drops to 102 or 103 where, with slight variations, it remains, except in fatal cases it may run as high as 108 or 110 degrees just previous to death. Young children may have convulsions, which, as a rule, do not appear in adults. Dizziness is nearly always present, and there is a dread of light and noise, and a morbid sensitiveness of the entire surface of the body.

Severe (tonic) spasms of the arms and legs are common.

The pupils may be contracted, dilated, or unequal or they may remain normal, but this is uncommon.

Loss of sight and hearing may occur during the middle period of the attack. Respiration is slower than natural in most, but not in all cases. The tongue is usually white and moist, sometimes natural, but in prolonged cases it becomes yellow or dark.

In some cases, on the second or third day or later, spots, from which the disease takes its name, "spotted fever," appear on the neck, breast or limbs, rarely on the face. They are red, purple or black, and distinct, but not elevated and do not disappear on pressure and may remain after death. They are either congested portions of the skin, or subcutaneous extravasations of blood.

There may be an inflammation of the middle-ear with perforation of the drum membrane followed by otorrhœa. If the internal ear is involved there is a staggering gait after recovery.

The duration of fatal cases is usually short. Some die within three or four hours; many within twenty-four. The first four days are the most perilous to life. After recovery blindness or deafness may remain.

Sometimes the fever assumes a typhoid type. In these cases, the tongue becomes dark or purplish, sordes appear on the lips and teeth; there is diarrhœa; a tympanitic condition of the abdomen; and the pulse is weak and irregular. The patient may finally recover, or die of weakness; and an attack may be followed by paralysis.

The most frequent complications are pleurisy, and pneumonia.

TREATMENT: As soon as complete reaction from the chill has occurred administer 10 drops of the Fl. Ext. of Gelsemium and 2 or 3 drops of the Tr. of Veratrum Viride, hypodermically, after which administer the following by the mouth:

Tr. of Veratrum Viride,.....	36 drops,
Fl. Ext. of Gelsemium,.....	54 drops,
Fl. Ext. of Echinacea,.....	6 drachms,
Fl. Ext. of Baptisia Tinctoria,.....	36 drops,
Water,.....	12 teaspoonfuls.

Mix and give a teaspoonful every hour or every hour and a half. Should this fail to control the pain and muscular contractions in addition to it 5 drops of the Fl. Ext. of Gelsemium should be given, hypodermically, every two or three hours as is necessary for the relief of pain and muscular spasms.

By all means keep the head cool. This may be accomplished by pouring cold water on it, from time to time, as is necessary to accomplish the desired result. The feet must be kept warm. This may be accomplished by bathing them in warm water when they are cool and keeping hot rocks, bricks, irons, etc., applied to them.

Calomel may be given at beginning of the attack, thus:

Calomel,.....	1 grain,
Bicarbonate of Soda,.....	10 grains,
Powd. Ipecac,.....	1 grain.

Mix and divide into five powders and give one every hour. Should they fail to act on the bowels give Oil, Salts or a Seidlitz Powder.

Bromide of Soda is a valuable remedy in these cases and may be given, in connection with the Gelsemium, in 10 to 20-grain doses every two or three hours as it is required. Bromide of Potash may be used instead of the Bromide of Soda but it is thought to be harder on the stomach than the soda.

If the foregoing fails to relieve the pain and muscular contractions $\frac{1}{4}$ of a grain of the Sulphate of Morphine may be given, hypodermically, every two or three hours as is necessary to keep the patient quiet. The Morphine is thought to possess curative properties in these cases.

If the pulse becomes weak or irregular give Digitalis and Cactus, adding the Echinacea and Baptisia, and if the pupils are dilated, Belladonna should also be added, thus:

Fl. Ext. of Digitalis,.....	18 drops,
Fl. Ext. of Echinacea,.....	6 drachms,
Fl. Ext. of Baptisia, Tinctoria.....	36 drops,
Fl. Ext. of Belladonna,.....	6 drops,
Water,.....	12 teaspoonfuls.

Mix and give a teaspoonful every two hours.

Where children are having convulsions, in addition to the treatment already recommended, Chloral may be given every half-hour until relieved. The dose of it is one grain for each year of age up to twenty.

Should an inflammation of the middle-ear occur the drum membrane should be punctured and the treatment for otorrhœa used.

If the fever assumes a typhoid type treat it as such. See paralysis.

DIPHTHERIA.

Diphtheria is a general specific, infectious, and contagious disease; characterized by the formation of a tough, grayish, white membrane upon the mucous surfaces of the throat, glandular enlargements, fever and great prostration.

It is caused by the Klebs-Loeffer bacillus. It is a disease of childhood, though adults are subject to it. One attack predisposes to another. Bad hygienic surroundings increase its virulence and diffusion, although, the principal cause of its spread is contagion. Its average mortality is from 30 to 40 per cent., and in laryngeal diphtheria as high as 75 per cent.

SYMPTOMS: It sometimes begins with soreness of the throat, stiffness of the neck, tenderness in the region of the angles of the jaws, headache, loss of appetite, constipated bowels, scanty high-colored urine, and a chill, which is followed by fever. In other cases, the chill and the foregoing symptoms come on at the same time.

The tongue is usually coated with a whitish or a brownish fur. The throat soon becomes red and swollen, sometimes dusky, especially that portion of it known as the fauces, palate and tonsils; and by the second day there will be noticed whitish or ash-colored spots in some part of the throat, usually on one or both tonsils. These spots spread until they coalesce and form a kind of membrane, which causes more or less difficulty in breathing and swallowing.

In severe cases this membranous deposit is very profuse, sometimes extending into the nose, producing an offensive,

watery discharge. At other times it extends downwards into the larynx; when, we have very much the same symptoms as in croup; such as hoarseness, loss of voice, a peculiar cough and great difficulty in breathing. This last-named trouble may grow worse and worse until breathing becomes impossible and unless relief is obtained death closes the scene.

In other cases the membrane comes off leaving a raw, inflamed and bleeding surface, which is soon covered again with the peculiar formation.

The average duration of an attack is about ten days. Of course, mild cases recover sooner. Relapses are common. Paralysis of various parts of the body frequently follows the disease. Albuminuria is usually present.

TREATMENT: As soon as the nature of the disease is discovered administer, hypodermically, 800 or 1,000 units of a reliable Diphtheria Antitoxin. Should a favorable result not be attained within twenty-four hours, then, administer in the same manner, 1,500 or 2,000 units and should there not be a decided improvement by the third day a similar dose should be administered. The injections should be made rather deeply into the subcutaneous cellular tissue of the thigh or buttock.

Where patients have been exposed to the infection of the disease the hypodermic injection of 60 units of Diphtheria Antitoxin affords protection against the disease. Every antiseptic precaution should be used in injecting the Diphtheria Antitoxin.

Control the fever with sedatives ("fever-drops") as in any other disease. If the pulse is too quick and too full give Veratrum or Aconite, the latter being the better remedy in these cases. If indicated add the Gelsemium and if the glands of the neck are enlarged Phytolacca should be given and Echinacea should be given in all cases, thus:

Tr. of Aconite Root,	.....18 drops,
Fl. Ext. of Gelsemium,	.....27 drops,
Fl. Ext. of Phytolacca Decandra,	...18 drops,
Fl. Ext. of Echinacea,	.....6 drachms,
Water,	.....12 teaspoonfuls.

Mix and give a teaspoonful every hour and a half or two hours while the pulse is too quick and too full.

Or if the patient is drowsy, the pupils being too large and the feet and hands cool, Belladonna should be used as follows:

Tr. of Aconite Root,	.....18 drops,
Fl. Ext. of Belladonna,	.....6 drops,
Fl. Ext. of Phytolacca Decandra,	...18 drops,
Fl. Ext. of Echinacea,	.....6 drachms,
Water,	.....12 teaspoonfuls.

Mix and give a teaspoonful every hour and a half or two hours while the pulse is too quick and too full.

Where the pulse is weak or irregular give Digitalis and Cactus adding the Phytolacca and Echinacea and, if indicated the Belladonna, thus:

Fl. Ext. of Digitalis,	.....12 drops,
Fl. Ext. of Cactus Grandiflorus,	....24 drops,
Fl. Ext. of Belladonna,	.....6 drops,

Fl. Ext. of Echinacea,6 drachms,

Water,6 teaspoonfuls.

Mix and give a teaspoonful every two hours. Where the pulse is very weak 1-40 of a grain of the Nitrate of Strychine should be given every three or four hours.

Whiskey should be used freely in these cases and if necessary the Aromatic Spirits of Ammonia may be used. The proper amount of Whiskey for a child two years old is from a half to a teaspoonful every two or three hours; an adult from two to four drachms every two or three hours.

At the beginning of the attack Calomel may be administered, thus:

Calomel, 1 grain,

Bicarbonate of Soda,10 grains,

Powd. Ipecac, 1 grain.

Mix and divide into five powders and give one every hour. Should they fail to act on the bowels give Oil or Salts.

As soon as the Calomel has acted on the bowels commence the administration of the Sulphide of Calcium. It may be given in $\frac{1}{8}$ -grain doses every three hours.

Many remedies have been used as local applications for the throat. For this purpose the following is probably one of the best:

Peroxide of Hydrogen,2 ounces,

Water,2 ounces.

Mix and use in the nose and throat every hour or two with an atomizer. By this means the nose is kept clean thereby preventing the extension of the disease to the nasal

cavities. The tube and nozzle of the atomizer should be of hard rubber or glass as contact with metal favors the decomposition of the Peroxide. The following is also valuable:

Carbolic Acid, 20 drops,
 Tr. of Muriate of Iron, 4 drachms,
 Glycerine, 1 ounce,
 Water, sufficient to make, 4 ounces.

Mix and swab the throat every three hours. In children this must be done very gently as, otherwise, more harm than good may result.

Where the glands of the throat are swollen the following may be used:

Gum Camphor, $\frac{1}{2}$ ounce,
 Carbolic Acid, $\frac{1}{2}$ ounce,
 Alcohol, 2 drachms,
 Glycerine, 2 drachms,
 Olive Oil, $1\frac{1}{2}$ ounces.

Mix and apply externally to the throat every three or four hours.

The atmosphere of the sick-room should be kept impregnated with the steam from the following:

Spirits of Turpentine, 1 ounce,
 Carbolic Acid, 1 drachm,
 Water, 1 quart.

Mix and put it in a broad vessel, place the vessel on an oil stove and regulate the heat as is required.

Where the urine is scanty 30 drops of the Fl. Ext. of Buchu may be given every three or four hours until the condition is relieved.

The diet must be of the most nutritious character, consisting of such articles as milk, eggs, chicken-tea, beef-tea, etc. If the act of swallowing is very painful or impossible, nutritious enemas should be used, the following being a good formula:

Milk,	1 ounce,
Whiskey,	$\frac{1}{2}$ ounce,
Egg,	one,
Salt,	sufficient.

Mix, beat thoroughly, warm and use.

Where the larynx is involved and there is danger of suffocation, intubation or tracheotomy should be resorted to, however, no one but a competent surgeon should undertake this.

Plenty of sunlight and fresh air must be admitted to the sick-room.

Should paralysis follow, it may usually be relieved with Nux Vomica.

PART III.

DISEASES OF THE RESPIRATORY APPARATUS.

The respiratory apparatus consists of the nares, pharynx, larynx, trachea, lungs and their covering.

ACUTE NASAL CATARRH.

CORYZA; COLD.

This is an inflammation of the mucous membrane lining the nose and the cavities communicating with it; characterized by more or less fever, fulness, and discomfort in the head. It is popularly known as "cold" or "cold in the head."

Its principal causes are exposure and changeable weather. Authorities state that the disease probably depends upon a micro-organism. An inflammation of the lining membrane may also be produced by irritating fumes, such as those of Iodine, Mustard, or Ammonia.

SYMPTOMS: An attack usually begins with languor, headache, a "stuffing up" of the nose, chilliness, followed by more or less fever and pain in various parts of the body. The nose becomes dry and there is more or less sneezing. The tear-ducts are swollen; the eyes watery; the sense of smell is lost; the sense of taste impaired, and there is more or less soreness of the throat. If the larynx is involved

the voice is husky, sometimes lost; and where the inflammation extends to the Eustachian tubes there may be impairment of hearing. Bronchial irritation with more or less cough is common in severe cases. The tongue is slightly coated, the bowels constipated and the urine scanty and high colored. This condition lasts from one to three or four days and is followed by free secretion from the nose and a gradual disappearance of the symptoms.

TREATMENT: The free use of hot drinks, such as hot lemonade or a "vinegar stew" containing Ginger and Pepper followed by a hot foot-bath and the administration of the following, just before retiring for the night, will usually afford relief:

Sulphate of Quinine,.....	5 grains,
Dover's Powder,.....	8 grains.

Mix and administer at one dose.

Fever, when present, should be controlled with sedatives ("fever-drops") as in any other disease.

If the bowels are constipated give Oil, Salts or a Seidlitz Powder.

Where there is scantiness of urine administer the following:

Acetate of Potash,.....	5 drachms,
Water,.....	2 ounces.

Mix and give a teaspoonful, in a sup of water, every three hours.

Where there is soreness of the throat add as much Chlorate of Potash to a glass of water as it will dissolve and use as a gargle every hour. At the same time the

throat should be bathed with Spirits of Turpentine and, then, well wrapped with flannel.

When cough is present, it may be relieved with the following:

Tr. of Lobelia,..... $1\frac{1}{2}$ drachms,

Fl. Ext. of Ipecac,..... $\frac{1}{2}$ drachm,

Syrup of Wild Cherry, to make,.....4 ounces.

Mix and give a teaspoonful every three hours.

CHRONIC NASAL CATARRH.

Chronic nasal catarrh is a chronic inflammation of the mucous membrane lining the nasal passages, with more or less alteration of structure; characterized by a sense of fullness in the nose, increased nasal secretion, an impairment of the sense of smell, and hearing.

Its most common causes are frequent attacks of the acute variety of the disease, scrofula and syphilis.

SYMPTOMS: A feeling of fullness in the nose, an increase of the secretion, which is thick and of a greenish color and often very offensive. It sometimes collects in the recesses of the nose and forms hard crusts, which are removed with difficulty. Where ulceration of the lining of the nose occurs the discharge has a foetid odor and is called ozena.

The mucous membrane is either thickened and of a dark-red color, or it is thin, pale and atrophied. The last-mentioned condition is especially seen in cases of long standing. Where the inflammation involves the back part of the nose and upper part of the pharynx, there

is a constant "hawking," to clear the throat, especially of a morning, immediately after arising.

Sudden changes of temperature, and exposure cause frequent relapses, with increased severity of the symptoms when, the difficulty in breathing through the nose is increased.

The special sense of smell is often impaired and not infrequently entirely abolished; the special sense of hearing is more or less diminished, from an extension of the inflammation to the Eustachian tubes. When the disease extends to the frontal sinuses there is a constant frontal headache, with a feeling of weight. When the inflammation extends to, and obstructs the nasal ducts the tears flow over the cheeks and there is more or less congestion or irritation of the eyes.

Permanent cures are seldom effected, the disease being so decidedly chronic, the treatment is necessarily protracted and most patients tire of it before a complete cure is effected.

TREATMENT: This should be commenced in the spring as the weather at this time is less changeable, therefore, relapses are not so liable to occur.

If the patient is scrofulous or syphilitic in addition to local treatment the following should be used:

Bichloride of Mercury,..... $1\frac{1}{2}$ grains,
Iodide of Potash,.....1 ounce,
Water, sufficient to make,.....6 ounces.

Mix and give a teaspoonful after each regular meal.

Or:

Iodide of Potash, 1 ounce,

Compound Syrup of Stillingia, to make, 6 ounces.

Mix and give a teaspoonful after each regular meal.

If the patient is debilitated a tonic should be used instead of the foregoing and the following answers admirably in these cases:

Fl. Ext. of Nux Vomica, 3 drachms,

Fl. Ext. of Hydrastis Canadensis, .. 1 ounce,

Fowler's Solution of Arsenic, 1½ drachms,

Aromatic Elixir, sufficient to make, . 6 ounces.

Mix and give a teaspoonful before each regular meal.

If the patient is suffering with chronic constipation, it must be overcome by the administration of the Fl. Ext. of Cascara Sagrada. It may be given with the tonic.

The nasal passages should be thoroughly cleansed with the following:

Carbolic Acid, 4 drops,

Bicarbonate of Soda, 20 grains,

Borate of Soda, 20 grains,

Glycerine, 4 drachms,

Water, sufficient to make, 4 ounces.

Mix and use with an atomizer or a proper syringe several times a day. After which, if the mucous membrane is full and turgid, use the following:

Ichthyol, 2 drachms,

Glycerine, 6 drachms.

Mix and apply thoroughly to all parts of the nasal cavity.

The following may also be used with decided benefit in these cases:

Powd. Sanguinaria,	1	drachm,
Tannic Acid,	5	grains,
Powd. Camphor,	1	drachm,
Menthol,	2	grains,
Subnitrate of Bismuth,	2	drachms.

Mix and use as a snuff every four hours after cleansing the nose.

Or:

Chloride of Ammonia,	1	drachm,
Glycerine,	2	drachms,
Fl. Ext. of Pinus Canadensis,	1	ounce,
Water, sufficient to make,	2	ounces.

Mix and after cleansing the nose drop ten drops into each nostril three times a day.

In some cases a permanent cure cannot be effected without the aid of surgery.

LA GRIPPE.

INFLUENZA.

La grippe is an acute, infectious, pandemic disease, characterized, anatomically, by a catarrhal condition of the respiratory tract and sometimes the digestive; clinically, by chilliness, fever, severe headache, pains in the eyes, muscles and joints, sneezing, injected, watery eyes, and a severe cough.

It is caused by the bacillus of Pfeiffer, which is uninfluenced by soil, climate, season, or atmospheric conditions. Following the pandemic, there are, as a rule, for several years endemic or epidemic outbreaks of the disease in different localities. It is thought to be contagious, and one attack predisposes to another. The first epidemic of the disease in the United States was in 1647.

SYMPTOMS: An attack is usually ushered in suddenly with a well-marked chill or rigor followed by fever, the temperature reaching 103 to 105 degrees. The patient complains of chilliness along the spine after the appearance of the fever. The pulse is full and quick, the face flushed; and there is severe headache with acute pains in the eyes and frontal sinuses; there is sneezing, pains in the muscles, throat and joints, and a dry cough, which soon becomes loose, and is accompanied by slight difficulty in breathing and more or less soreness in the chest and throat.

The tongue is usually furred and there is frequently vomiting. The bowels are constipated, except when the digestive tract is involved, when there may be diarrhœa or dysentery. The urine is usually scanty and high colored.

In from four to seven days the fever declines and a protracted convalescence ensues, the patient being debilitated altogether out of proportion to the severity of the attack. Its most frequent complications are bronchitis and pneumonia.

Relapses are common. An attack may be followed by persistent headache, neuralgia, neuritis, insomnia, mania, enlargement of the lymphatic glands, etc.

TREATMENT: Control the fever. This may be accomplished by the administration of sedatives according to indications. If the pulse is too quick and too full give Veratrum or Aconite, and if there are flushed face and bright eyes, the pupils being too small, add Gelsemium, and if cough is present add Lobelia, thus:

Tr. of Veratrum Viride,.....18 drops,
Fl. Ext. of Gelsemium,.....27 drops,
Tr. of Lobelia,.....36 drops,
Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half or two hours while there is fever.

If the stomach is irritated give Aconite instead of the Veratrum, adding the Gelsemium and Lobelia, as follows:

Tr. of Aconite Root,.....18 drops,
Fl. Ext. of Gelsemium,.....27 drops,
Tr. of Lobelia,.....36 drops,
Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half or two hours while there is fever. If the patient is drowsy, the pupils being too large, give Belladonna instead of the Gelsemium. If the patient complains of muscular soreness 3 drops of the Fl. Ext. of Cimicifuga should be added to each dose of the "fever-drops."

Where the fever is very high and the skin dry from 3 to 5 grains of Acetanilide may be given every three or four hours.

Where there is pain in the side or breast apply hot salt, changing it as soon as it becomes cool.

The patient should have at least one action a day from the bowels. To procure this, when necessary, give Oil, Salts or a Seidlitz Powder; or if indicated, the following may be used:

Calomel, 1 grain,
 Bicarbonate of Soda, 10 grains,
 Powd. Ipecac, 1 grain.

Mix and divide into five powders; give one every hour.

If there is scantiness of urine give 20 grains of the Acetate of Potash every three or four hours.

If the fever is remittent give Quinine as is recommended in remittent fever.

If the pulse is weak or irregular give Digitalis and Cactus instead of the Veratrum or Aconite, adding the Lobelia and Belladonna, if indicated, thus:

Fl. Ext. of Digitalis, 12 drops,
 Fl. Ext. of Cactus Grandiflorus, 24 drops,
 Fl. Ext. of Belladonna, 6 drops,
 Tr. of Lobelia, 36 drops,
 Water, 18 teaspoonfuls.

Mix and give a teaspoonful every two hours. Whiskey may also be used in these cases; and if there is great prostration the 1-40 of a grain of the Sulphate of Strychnine may be given every three or four hours.

Should the cough continue after convalescence is established give the following:

Tr. of Lobelia, 1½ drachms,
 Fl. Ext. of Ipecac, ½ drachm,
 Syrup of Wild Cherry, sufficient to make, .4 ounces.

Mix and give a teaspoonful every three hours.

Where an attack is complicated with pneumonia treat it as such; and where an attack is followed by neuralgia the treatment recommended for that malady should be given.

For the purpose of aiding the patient in regaining his former strength, as soon as convalescence is fully established give the following:

Fl. Ext. of Nux Vomica,.....3 drachms,

Fl. Ext. of Hydrastis Canadensis,.....1 ounce,

Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful before each regular meal.

ACUTE PHARYNGITIS.

ACUTE SORE THROAT.

This is an acute inflammation of the mucous membrane of the tonsils, uvula, soft palate and pharynx; characterized by chilliness, fever, dryness and soreness in the throat, difficulty in swallowing and a constant desire to clear the throat.

Its most common causes are changeable weather, exposure to cold and wet and the swallowing of hot food and liquids and the action of irritating vapors. It also occurs as a result of scarlet fever, measles, erysipelas, diphtheria, la grippe and small-pox.

SYMPTOMS: An attack usually commences with chilliness followed by more or less fever, furred tongue, constipated bowels, dryness and soreness of the throat, headache, loss of appetite, pain and difficulty in swallowing, a cough and a constant desire to clear the throat with more

or less nausea. As the inflammation proceeds secretion is established, the discharge finally becoming yellowish, when, the inflammation subsides.

Occasionally there is the formation of pus in the sub-mucous and deeper tissues of the pharynx, constituting a retro-pharyngeal abscess. This condition may follow a wound from a sharp piece of bone or be secondary to caries of a cervical vertebra.

When the inflammation extends to the larynx, there is hoarseness and sometimes loss of voice; and when it extends to the Eustachian tubes there is dullness of hearing. An attack seldom lasts longer than from three to five days.

TREATMENT: When fever is present give sedatives according to indications as in any other disease. If the bowels are constipated give Oil, Salts or a Seidlitz Powder; or, if particularly indicated give the following:

Calomel,.....1 grain,

Bicarbonate of Soda,.....10 grains,

Powd. Ipecac,....1 grain.

Mix and divide into five powders and give one every hour.

If there is scantiness of urine give 20 grains of the Acetate of Potash or 30 drops of the Fl. Ext. of Buchu every three or four hours.

Locally, Chlorate of Potash is all that is required. A teaspoonful of it may be added to a glass of water and used as a gargle every hour. The following also answers a good purpose:

Fl. Ext. of Baptisia,.....1 ounce,
 Fl. Ext. of Hydrastis Canadensis,....1 ounce,
 Chlorate of Potash,.....2 drachms,
 Water,.....4 ounces.

Mix; use as a gargle or with an atomizer every hour.

Where there is ulceration, in addition to the gargles recommended, use the following:

Nitrate of Silver,.....20 grains,
 Water,.....1 ounce.

Mix and apply with a soft mop once or twice a day.

If the throat is raw and inclined to bleed use the following:

Perchloride of Iron,.....1 drachm,
 Glycerine,.....7 drachms.

Mix and apply with a soft mop once or twice a day.

If the attack is a severe one great relief may be given by applying cloths, wrung out of hot water, to the angles of the jaws, changing them frequently.

Should an abscess form evacuate the pus early, and if the patient is debilitated, especially during convalescence, give the following:

Fl. Ext. of Nux Vomica,.....3 drachms,
 Fl. Ext. of Hydrastis Canadensis, ...1 ounce,
 Aromatic Elixir, sufficient to make, .6 ounces.

Mix and give a teaspoonful before each regular meal.

CHRONIC PHARYNGITIS.

CHRONIC SORE THROAT.

This is a chronic inflammation of the mucous membrane of the larynx; characterized by a sensation of dryness

and tickling or burning in the throat with frequent hawking to expel the accumulation of viscid mucus.

Its most common causes are frequent attacks of the acute variety, excessive smoking and drinking, continued exposure to cold air, excessive use of the voice, etc.

SYMPTOMS: These are a sensation of dryness and tickling or burning in the throat with frequent short cough or hawking to clear the throat, especially upon first rising in the morning. Acute exacerbations are frequent; and if the larynx is involved there is hoarseness with a dry, hacking cough.

On examination the mucous membrane is found thickened and laid together in folds, or presenting a flabby, relaxed appearance; the mucous follicles enlarged and the color changed from pink to a dusky-red, livid, or bluish color.

TREATMENT: This variety of pharyngitis is a very difficult disease to cure. Where the patient's general health is impaired in addition to the local remedies, the proper constitutional treatment should also be adopted.

If there is any trace of impure blood give the following:

Iodide of Potash,1 ounce,
Compound Syr. Stillingia, sufficient to make, .6 ounces.
Mix and give a teaspoonful after each regular meal.

Or:

Bichloride of Mercury,1½ grains,
Iodide of Potash,1 ounce,
Water, sufficient to make,6 ounces.

Mix and give a teaspoonful after each regular meal.

As a local application use the following:

Tr. of Myrrh,	1 ounce,
Tr. of Capsicum,	2 drachms,
Fl. Ext. of Baptisia Tinctoria,	1 ounce,
Water, sufficient to make,	4 ounces.

Mix and use as a gargle three or four times a day.

Or:

Carbolic Acid,	10 drops,
Tr. of Iodine,	2 drachms,
Glycerine,	6 drachms.

Mix and use with a soft mop three times a day.

Should the foregoing fail, try the following:

Nitrate of Silver,	20 grains,
Water,	1 ounce.

Mix and use with a soft mop twice a day.

In the treatment of pharyngitis it is important to bear in mind that the upper part of the pharynx is situated behind and above the soft palate, which hides it from view upon an ordinary examination through the mouth; and when a remedy is applied the operator should be careful to apply it to all parts of the pharynx.

ACUTE LARYNGITIS.

ACUTE INFLAMMATION OF THE LARYNX.

Is an acute catarrhal inflammation of the mucous membrane of the larynx; characterized by feverishness, cough, soreness of the throat, hoarseness and more or less difficulty in breathing and swallowing.

Its most common causes are exposure to cold and dampness, wounds of the larynx, the inhalation of irritating vapors or dust, the cigaret-habit, drinking concentrated alcoholic liquors, prolonged public speaking or singing, violent fits of crying, etc.

SYMPTOMS: It usually commences with a slight chill or chilliness, pain and a sensation of dryness and rawness in the larynx, with hoarseness, a dry cough, and a disposition to clear the throat. Fever usually follows and there is more or less difficulty in breathing and swallowing. The cough, which was at first dry, becomes loose in the course of twenty-four or forty-eight hours, and the matter expectorated is sometimes streaked with blood. In some cases there is a loss of voice (aphonia), caused by an involvement of the vocal cords, which are located in the larynx. There is sometimes, œdema of the glottis (a dropsical swelling), which produces, if prompt relief is not obtained, suffocation and death. In children there may be a spasmodic contraction of the glottis (upper part of the larynx), especially during the night, which almost, if not quite, stops breathing for the time being.

TREATMENT: The patient should be put to bed and the temperature of the room kept uniform, and the air moist by the constant boiling of a vessel of water in the room. At the beginning of the attack give a full dose of Oil or Salts and bathe the feet in strong Mustard-Water, as hot as it can be borne. Bathe the throat thoroughly with Compound Stillingia Liniment, then, apply flannel cloths, wrung out of hot water, to the neck, changing

them sufficiently often to prevent their becoming cool. The patient should also inhale the steam from equal parts of hot water and vinegar frequently, a few minutes at a time; or instead of the vinegar Spirits of Turpentine may be added to the water and used in the same manner.

When fever is present it should be controlled with sedatives ("fever-drops") as in any other disease. An inflammation is controlled with precisely the same remedies with which we control fever.

When the breathing becomes hard, especially during inspiration, and the voice hoarse, soon sinking to a whisper, there is œdema of the glottis setting up. This demands prompt recognition and treatment, which should consist of the administration of 30 drops of the Fl. Ext. of Jaborandi every half-hour until it produces perspiration, or an increased flow of saliva. Should the patient be unable to swallow, the hypodermic injection of $\frac{1}{6}$ of a grain of the Hydrochlorate of Pilocarpine every thirty minutes until it produces similar effects to that of Jaborandi, will usually lessen the swelling. The Fl. Ext. of Lobelia in from 5 to 20-drop doses every ten to twenty minutes until nausea, or even vomiting, is produced, is also a valuable remedy in these cases.

Should the foregoing fail to give relief, an opening (tracheotomy) will have to be made in the trachea (wind-pipe) and a tube inserted and retained there in order to prevent suffocation until the swelling subsides.

When there is a spasmodic contraction of the glottis the cough is harsh and dry and there is a sudden attack

of difficult breathing amounting, almost, to a cessation. The child should at once be placed in a tub of hot water and flannel cloths wrung out of the same and applied to the neck, changing them frequently to prevent their becoming cool.

The inhalation of a few drops of Chloroform usually affords prompt relief. A sufficient quantity of it to produce anæsthesia should not be given, as this is unnecessary.

To prevent a recurrence of the attack Lobelia should be administered sufficiently often to produce continuous nausea.

CHRONIC LARYNGITIS.

MINISTER'S SORE THROAT.

This is a chronic inflammation of the mucous membrane of the larynx; characterized by an insidious onset, irritation, slight soreness and a contraction of the throat when speaking, alteration of the voice and a cough.

Its most common causes are frequent acute attacks, an extension of the inflammation from chronic pharyngitis, the long-continued use of the voice as in public speaking or singing; the inhalation of irritants, as tobacco smoke, etc.; the immoderate use of alcoholic liquors and syphilis.

SYMPTOMS: Chronic laryngitis is insidious in its onset, patients frequently not being aware of its presence until the disease is fully confirmed. The first symptoms are irritation, slight soreness, more or less cough and a spasmodic contraction of the larynx after immoderate use of

the vocal organs; however, these symptoms are sometimes met with in those who have not over exerted the vocal organs. There is hawking to clear the throat; the voice is rough and harsh, sometimes sinking to a whisper during a discourse. These symptoms usually subside in a short time, the patient believing the attack to have been produced by a slight cold. As the disease progresses these attacks become more frequent, continue longer, the symptoms not entirely disappearing. When the disease is fully established there is a constant uneasy sensation in the larynx; the voice is greatly altered and there is a constant annoying cough. The material expectorated, at first, is scanty and consists of mucus, but later becomes purulent and not infrequently streaked with blood. Hemorrhage in the latter stages is not uncommon and may be profuse. Those afflicted with the disease take cold upon the slightest atmospherical change.

The general health of patients is usually impaired in proportion to the severity of the disease and not infrequently tuberculosis of the lungs is developed, soon terminating in death.

TREATMENT: Public speaking and singing must be abandoned for a time and all exposure avoided.

Where the patient is debilitated and the appetite not good, give the following:

Fl. Ext. of *Nux Vomica*, 3 drachms,

Fl. Ext. of *Hydrastis Canadensis*, ... 1 ounce,

Aromatic Elixir, sufficient to make, .6 ounces.

Mix and give a teaspoonful before each regular meal;

and for its effects on the larynx, at the same time, administer the following:

Fl. Ext. of *Collinsonia Canadensis*,... 1 ounce,
Aromatic Elixir, 3 ounces.

Mix and give a teaspoonful four times a day.

If the patient has any impurity of the blood, or if he is syphilitic, give the following:

Iodide of Potash,..... 1 ounce,
Bichloride of Mercury,..... 1½ grains,
Water, sufficient to make,..... 6 ounces.

Mix and give a teaspoonful after each regular meal.

Or:

Iodide of Potash,..... 1 ounce,
Compound Syr. of *Stillingia*, suffi-
cient to make,..... 6 ounces.

Mix and give a teaspoonful after each regular meal.

Local treatment is of great importance in these cases, and not only the larynx itself but also the nose and pharynx should be kept perfectly clean or as near so as possible. For this purpose we know of nothing better than the following:

Carbolic Acid, 6 drops,
Bicarbonate of Soda,..... 30 grains,
Borate of Soda,..... 30 grains,
Glycerine, 6 drachms,
Water, sufficient to make,..... 6 ounces.

Mix and spray the nose, pharynx and larynx with it every three or four hours.

Where there is dryness of the larynx the following should be used:

Chlorate of Potash,.....2 drachms,
Water,.....6 ounces.

Mix and use every three or four hours with an atomizer after the parts have been cleansed as previously directed.

Or:

Chloride of Ammonia,.....30 grains,
Water,.....6 ounces.

Mix and use in the same manner.

Where there is excessive secretion, the following should be used instead of the foregoing:

Sulphocarbolate of Zinc,.....18 grains,
Water,.....6 ounces.

Mix and also use with an atomizer every three or four hours after the parts have been cleansed as previously directed.

In severe cases the following may be used:

Tannin,.....10 grains,
Glycerine,.....1 ounce.

Mix and apply directly to the larynx with a cotton-swab or a camel's-hair brush.

Or:

Nitrate of Silver,.....10 grains,
Water,.....1 ounce.

Mix and use in the same manner.

Tobacco and alcoholic drinks, when used, must be abandoned and crowded and overheated rooms avoided.

Should tuberculosis of the lungs develop treat it as such.

APHONIA.

LOSS OF VOICE.

Loss of voice is really only a symptom of disease and may be temporary or permanent. Temporary aphonia is quite common in croup, laryngitis and colds. A permanent aphonia may result from a thickening of the mucous membrane covering the vocal cords, hypertrophy, atrophy or ulceration of the cords themselves; and it may be caused by intense excitement, over exertion of the vocal organs, or a paralysis of the muscles of the larynx.

SYMPTOMS: Where it results from cold without inflammation of the larynx, the loss of voice, which is sudden and complete, is preceded a few days by hoarseness.

Where it is produced by ulceration or inflammation the loss of voice is gradual; there is more or less cough and the material expectorated consists of mucus or mucus and pus. When occurring as a result of thickening of the mucous membrane covering the cords, hypertrophy or atrophy, the loss of voice is usually gradual; and where it results from paralysis the loss may be sudden or gradual and may or may not be attended by inflammation.

TREATMENT: Patients should not under any circumstances attempt to use the voice even in cases of partial aphonia.

Where there are symptoms of inflammation the treatment recommended for acute laryngitis should be adopted. Where it is caused by ulceration a solution of Nitrate of Silver should be applied directly to the part.

Where it is a result of paralysis give 3 or 4 drops of the Fl. Ext. of Nux Vomica before each regular meal; and at the same time electricity in the form of the Galvanic current should be used once or twice a day passing the current from the head downward.

The inhalation of the following is recommended:

Oil of Cajeput, 1 drachm,

Oil of Stillingia, 1 drachm,

Alcohol, 2 ounces.

Mix, wet a cloth with it and inhale the vapor a few minutes every hour or so.

If there is any impurity of the blood appropriate remedies to overcome it should be given.

SPASMODIC LARYNGITIS.

CROUP.

Croup is a catarrhal inflammation of the mucous membrane of the larynx associated with spasmodic contractions of the glottis; characterized by a dry, harsh, ringing, metallic cough, difficult breathing and attacks of threatened suffocation.

Its most common causes are atmospherical changes or cold, excitement, violent emotions and excesses in eating and drinking. It is a disease of childhood.

SYMPTOMS: An attack is sometimes preceded for a day or two by the symptoms of cold, such as hoarseness and cough. In other cases, the child retires at night, apparently in health, and after several hours' sleep it is suddenly awakened by a paroxysm of difficult breathing, amounting, in some cases, to almost suffocation. There

is a dry, harsh, ringing, metallic cough and after a few minutes to one or two hours, the breathing becomes easier, the cough less harsh, the skin moist and the child falls asleep.

On the following day the respirations are usually normal but there is more or less cough. Unless prevented by treatment about the same hour the following night, the paroxysms recur.

At the commencement of the attack there is frequently more or less fever, the skin hot and dry and the pulse quick and strong, but when relief is not promptly obtained, the extremities become cold, the body covered with a cold, clammy perspiration, and the pulse weak and rapid. However alarming the paroxysms may be to parents and friends, death rarely ever occurs from simple croup.

TREATMENT: Put the patient in a tub of warm water, as hot as can be borne and apply cloths wrung out of the same to the throat. Administer from 10 to 20 drops of the Tr. of Lobelia, which is a specific, every ten or fifteen minutes until relief is obtained or vomiting produced; and if there is fever administer sedatives ("fever-drops") according to indications.

The inhalation of a few drops of Chloroform usually affords prompt relief, however this should not be carried to complete anæsthesia.

Ipecac, in the form of the Syrup, in half-teaspoonful doses, or the Fl. Ext., in 15 to 30-drop doses, is very efficient. Prof. Bartholow recommends Turpeth Mineral, in from 1 to 3-grain doses. Prof. Da Costas suggests

the cautious use of the Hydrochlorate of Apomorphine in 1-10-grain doses, hypodermically. Tickling the fauces with a feather, or the finger, until vomiting is produced is also very efficient. Powd. Alum may also be used. When the patient is relieved administer Oil or Salts to empty the bowels.

CROUPOUS LARYNGITIS.

MEMBRANOUS CROUP; TRUE CROUP.

This is an acute inflammation of the mucous membrane of the larynx, attended with the formation of a false membrane and the occurrence of spasm of the glottis; characterized by fever, a peculiar, harsh, dry, metallic cough, difficult breathing, with a loud respiratory sound and usually loss of voice and a tendency toward death by suffocation.

The disease occurs, most commonly, during damp winters and is a disease of childhood, occurring usually in the strong and vigorous, well-nourished males. Most authorities state that the disease is identical with laryngeal diphtheria, but this is very probably a mistake, as membranous croup is a local disease, while diphtheria is a constitutional disease with a local manifestation.

SYMPTOMS: Fortunately this form of croup is rare. It usually begins with cold, its progress being gradual. There is a gluey material, called plastic lymph, deposited on the mucous membrane of the larynx. This material adheres to the throat until, in some cases, the larynx is completely closed. Ordinarily there is more or less hoarseness with a cough for several days, sometimes a

week, before the attack begins. The breathing, during this time, is accompanied by a dry, whistling noise, which may frequently be heard across the room. The hoarseness soon becomes worse; the cough aggravated; the patient not yet being confined to bed. Sometime during the night the child is aroused by difficult breathing or an attack of coughing; and, upon examination, it will be discovered that the patient has fever, a dry skin and an accelerated pulse. The hoarseness soon increases until there is complete loss of voice; the paroxysms of difficult breathing become severe and frequent; the whistling noise augmented; and the cough ringing and troublesome. These symptoms increase as the disease advances and if relief is not obtained the lips become blue, the veins full, the extremities cold, the skin purplish, the patient languid, finally sinking into a stupor when death soon closes the scene.

In other cases the membrane, or part of it, is expelled, the cough becomes loose and the attacks of suffocative breathing less frequent, the fever subsides, the voice returns and the patient slowly recovers.

This may be distinguished from spasmodic croup by the constantly increasing difficulty in breathing, the dryness and whistling noise produced by the air passing through the larynx and the peculiar, dry metallic cough. The duration of an attack is usually from a week to ten days.

TREATMENT: Control the fever with the indicated sedatives as in any other disease.

The inhalation of the vapor of freshly burned and slaked Lime is one of our most efficient means for detaching the false membrane, therefore, its use should not be neglected.

Flannel cloths, wrung out of hot water, should be applied to the throat and changed sufficiently often to prevent their becoming cold.

To prevent the formation of the membranous exudation Calomel is one of our most efficient remedies. It may be used as in the following formula:

Calomel,	..... 2 grains,
Bicarbonate of Soda,	..... 10 grains,
Powd. Ipecac,	..... 1 grain.

Mix; divide into ten powders; give one every two hours.

Where the respiration is greatly obstructed by the membrane its detachment and expulsion may frequently be accomplished by emetics. For this purpose Turpeth Mineral (Hydrargyri Subsulphas Flavus) in 2-grain doses, for a child two years old, repeated as often as is required by the obstructed breathing, is one of our most efficient remedies. The Fl. Ext. of Ipecac and also the Tr. of Lobelia may be used as emetics in these cases and are probably as efficient as the Turpeth Mineral.

The use of all irritating or caustic applications to the fauces or larynx are positively contra-indicated.

Where the pulse becomes weak or irregular Digitalis and Cactus together with Whiskey should be used as indicated. Where these means fail to give relief tracheotomy or intubation should be resorted to.

PERTUSSIS.

WHOOPIING COUGH.

This is an acute, specific, contagious affection; characterized by more or less fever, catarrh of the respiratory mucous membrane followed by a dry, paroxysmal, convulsive cough, there often being a loud crowing inspiration or "whoop" during the paroxysm.

All ages are subject to it and second attacks of the disease, which are known as Nurse's cough are quite common. It is probably caused by the *Bacillus tussis convulsivæ*.

SYMPTOMS: After a variable length of time, though more commonly from six to twenty-one days after an exposure to its contagion, it will be noticed that the patient has a spasmodic cough, which is accompanied by more or less fever and a peculiar "whoop" from which the disease takes its name. During the attacks of coughing the face becomes flushed, the eyes red and watery and, in severe cases, there is vomiting, especially after meals. Hemorrhage from the nose is quite frequent; and, in infants, there may be high fever, with either active or passive congestion of the brain, and convulsions.

Bronchitis and pneumonia are the most frequent complications. An attack may be followed by dropsy of the brain, especially in young subjects, however, this is uncommon.

TREATMENT: Control the fever with sedatives administered according to indications, as in any other disease.

To control the cough give the following:

Tr. of Lobelia,.....1 drachm,
Fl. Ext. of Ipecac,..... $\frac{1}{2}$ drachm,
Syrup of Wild Cherry, sufficient to make,. 4 ounces.

Mix and give a teaspoonful every three hours.

If there are convulsions administer the indicated "fever-drops" every half-hour until relief is obtained or until four or five doses are given. Keep the head cool and the feet warm; and, if necessary, give Hydrate of Chloral every half-hour until the convulsions are controlled. The proper dose of Chloral for a child is one grain for each year of age up to twenty.

When high fever is present keep the bowels open and the kidneys acting normally.

Where other complications occur they must receive proper treatment.

ACUTE BRONCHITIS.

BRONCHIAL CATARRH.

This is an acute, catarrhal inflammation of the mucous membrane of the bronchial tubes; characterized by fever, pain in the breast, more or less difficulty in breathing and a cough with, at first scanty expectoration, but later becoming profuse.

It is quite common in children and the aged and not uncommon in those of middle-age.

Its most frequent causes are cold, exposure, atmospheric changes and the inhalation of irritants such as dust, smoke, gases, vapors and air too hot or too cold.

SYMPTOMS: An attack usually commences with symptoms of an ordinary cold, such as hoarseness, soreness of the throat, lassitude and pain in the limbs, followed by a sensation of chilliness and more or less fever, with tightness, pain and soreness in the upper part of the chest. The cough is at first hard, dry, tight and painful, but in the course of a few days the expectorated matter consists of a clear tenacious mucus, which gradually becomes yellowish or greenish and sometimes very profuse. During the latter part of severe attacks the material expectorated becomes purulent. Finally the fever gives way and the only disagreeable symptoms that remain are extreme weakness and the cough, which is sometimes severe.

The usual duration of an attack is from twelve to twenty days, but this period may be greatly prolonged by improper treatment or nursing.

Where the smaller bronchial tubes are the seat of the inflammation it is called capillary bronchitis or bronchopneumonia. This condition is quite common in whooping cough and the eruptive fevers, especially measles. It is also frequently met with in the very young, and also in the old and feeble. This form of the disease may be known by the high fever, increased difficulty in breathing with paroxysms, which almost amount to suffocation. The pulse becomes weak and rapid and the surface of the body cold and purplish from imperfect oxygenation of the blood. This form of disease frequently terminates fatally, especially in the very young and the aged. Pre-

ceding dissolution there is usually stupor, insensibility, coma, or in children perhaps convulsions.

TREATMENT: Control the fever with sedatives administered according to indications. If the pulse is quick and full give Veratrum or Aconite; and if the face is flushed, the eyes bright and the pupils contracted, add Gelsemium, thus:

Tr. of Veratrum Viride, 18 drops,
 Fl. Ext. of Gelsemium, 27 drops,
 Water, 18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half or two hours.

With children and where the stomach is irritated give Aconite instead of the Veratrum, adding the Gelsemium, if indicated; but if the patient is drowsy, the pupils being too large, give Belladonna instead of the Gelsemium, thus:

Tr. of Aconite Root, 18 drops,
 Fl. Ext. of Belladonna, 6 drops,
 Water, 18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half or two hours while there is fever.

If the pulse is weak or irregular give Digitalis and Cactus, adding the Belladonna if indicated, thus:

Fl. Ext. of Digitalis, 12 drops,
 Fl. Ext. of Cactus Grandiflorus, 24 drops,
 Fl. Ext. of Belladonna, 6 drops,
 Water, 18 teaspoonfuls.

Mix and give a teaspoonful every two hours.

If indicated, at the beginning of the attack, Calomel should be given as follows:

Calomel, 1 grain,

Bicarbonate of Soda, 10 grains,

Powd. Ipecac, 1 grain.

Mix, divide into five powders and give one every hour.

Should they fail to act mildly on the bowels give Oil, Salts or a Seidlitz Powder.

The patient should have at least one action a day from the bowels throughout the attack.

If the urine is scanty give 20 grains of the Acetate of Potash or 30 drops of the Fl. Ext. of Buchu every three or four hours until the desired effects are obtained.

Where the expectoration is watery, the face, hands and feet swollen or puffy (œdematous) the Fl. Ext. of Apocynum Cannabinum in 3 or 4-drop doses, every four hours, acts almost as a specific. In such cases it is the very best cough remedy known to the writer.

Where the cough is dry and tight give the following:

Tr. of Lobelia, 2 drachms,

Fl. Ext. of Ipecac, 1 drachm,

Syrup of Wild Cherry, to make, 4 ounces.

Mix and give a teaspoonful every three or four hours.

This may act as an emetic, especially where the stomach is sensitive. In such cases decrease the dose.

Where the material expectorated is profuse give the following instead of the foregoing:

Chloride of Ammonia,.....4 drachms,
Fl. Ext. of Squill,.....2 drachms,
Fl. Ext. of Tolu,.....1 ounce,
Simple Syrup, sufficient to make,....4 ounces.

Mix and give a teaspoonful every three or four hours.

Where young children are suffering with capillary bronchitis and are threatened with suffocation from an accumulation of mucus in the bronchial tubes, emetics of $\frac{1}{2}$ to 1 drachm-doses of the Syrup of Ipecac may be given and repeated as demanded, however, care must be exercised not to keep the child continuously nauseated, nor to use the emetics to such an extent that they produce exhaustion.

In cases where there is considerable weakness, stimulants, such as Whiskey or Aromatic Spirits of Ammonia, should be used every two or three hours, or oftener, if necessary, the quantity depending upon the age and the condition of the patient. Where there is great prostration and feeble pulse it may become necessary to administer from the 1-60 to the 1-40 of a grain of Strychnine every three or four hours.

Care and judgment should be used in feeding and nursing the patient.

CHRONIC BRONCHITIS.

This is a chronic inflammation of the mucous membrane of the bronchial tubes; characterized by cough, more or less severe, and expectoration, in some cases scanty, while in others it is profuse.

It may follow repeated attacks of acute bronchitis or the repeated inhalations of dust, smoke or other irritants; but it is more commonly met with in gout, rheumatism, syphilis, aneurism of the aorta, lung, heart and kidney diseases and as a result of the excessive use of alcoholic liquors. It rarely ever attacks the young, but is the winter cough of the old, recurring with regularity as the weather gets cold and changeable.

SYMPTOMS: Unlike the acute form of the disease, in this, there is little, if any, fever. Cough is one of its most prominent symptoms and is more troublesome during cold and changeable weather than at other times, many patients being almost or entirely free from it during warm weather.

The disease may continue in this manner indefinitely without producing any serious results, where it is not associated with other diseases, however, it is generally more severe in character, the cough continuing throughout the year, being worse, as a general rule, after the slightest exposure or change in the atmosphere. It is usually more distressing during the night and early morning. Slight pain is sometimes felt in the chest, especially after a paroxysm of coughing. The expectoration varies in different cases; in some, it consists of a viscid, whitish, mucus and in many cases it is profuse; in others, it is yellowish or greenish and sometimes streaked with blood.

In some cases the skin is dry and harsh, the appetite poor, the bowels irregular, the urine high-colored and the tongue coated. As the disease progresses the pulse

becomes quick and weak; there is shortness of breath and the patient grows weaker day by day.

The patient finally suffers more or less with night-sweats; there is hollowness of the eyes and the material expectorated becomes more profuse, purulent, and sometimes very offensive. The disease may continue in this manner until death closes the scene.

The latter stage of severe cases presents many symptoms in common with pulmonary tuberculosis from which it can only be satisfactorily determined by auscultation and percussion of the lungs and a microscopical examination of the expectorated material.

TREATMENT: Attention to the general health is of the first importance. Underlying chronic diseases must receive appropriate treatment. Flannel or silk underclothing must be worn the year round and exposure of every kind must positively be prohibited.

Where the patient is debilitated, the appetite and digestion impaired, the following should be used:

Fl. Ext. of Nux Vomica, 3 drachms,

Fl. Ext. of Hydrastis Canadensis, 1 ounce,

Fl. Ext. of Gentian, 3 ounces,

Aromatic Elixir, sufficient to make, .6 ounces.

Mix and give a teaspoonful before each regular meal.

If the bowels are constipated give a sufficient amount of the Fl. Ext. of Cascara Sagrada after each regular meal to produce one average action a day from the bowels. From 10 to 30 drops is usually required.

Where there is scantiness of urine 20 grains of the Acetate of Potash or 20 to 30 drops of the Fl. Ext. of Buchu should be given three or four times a day.

Where the skin is harsh and dry the entire body should be sponged with warm water and dried with considerable friction before retiring each night.

Should the cough be harsh and dry or the expectoration scanty the patient may be benefited by the nauseating expectorants, such as the following:

Tr. of Lobelia,.....1½ drachms,

Fl. Ext. of Ipecac,.....1 drachm,

Syr. Wild Cherry, sufficient to make,.4 ounces.

Mix and give a teaspoonful every three or four hours.

Should the cough be loose and the expectoration free or profuse stimulating expectorants should be given instead of the foregoing, as:

Chloride of Ammonia,.....4 drachms,

Fl. Ext. of Squill,.....2 drachms,

Tr. of Tolu,.....1 ounce,

Simple Syrup, sufficient to make,.4 ounces.

Mix and give a teaspoonful every three or four hours.

In addition to the foregoing, where the expectoration is very profuse (bronchorrhœa), the odor being offensive, 20 to 30 drops of Carbolic Acid should be put into a half-pint of boiling water and the steam inhaled for a few minutes three or four times a day.

Counter-irritants applied to the chest are very beneficial in all cases of chronic bronchitis and the Compound Tar Plaster is one of the best agents, known, for this

purpose. It should be warmed, spread on thick cloth or thin leather, applied and worn as long as it can be tolerated, when, it should be removed for a few days, then, applied again and thus continued.

Where the patient is greatly debilitated an emulsion of Cod Liver Oil with Hypophosphites may be given.

The diet must be of the most nutritious character; and the patient should take moderate exercise in the open air during pleasant weather. The moderate use of Whiskey is of decided benefit in some cases. A change of climate, especially during the winter, is of decided benefit and should be urged if the patient's circumstances will admit it. Where the bronchial secretions are scanty a warm, moist climate, as Florida, is preferable, whereas if there is profuse bronchial secretion a dry, warm climate, as New Mexico, should be selected.

ASTHMA.

PHTHISIC.

Asthma is a paroxysmal spasmodic contraction of the muscular layer surrounding the smaller bronchial tubes, probably associated with a rigid contraction of the diaphragm, together with more or less bronchial catarrh; characterized by attacks of difficult breathing and a cough with mucous expectoration. The disease is generally believed to be of nervous origin and is undoubtedly, in many instances, hereditary, the patient's family having had either asthma, chorea or epilepsy. It is some times produced by a diseased condition of the nose. The inhalation of dust and vapors or the inhalation of

pollen from vegetation will sometimes bring on an attack. The latter is especially the case with what is known as hay asthma.

The disease is more common in men than in women; in children and young adults than in middle-life or old age; and is more frequently met with in the wealthy than in the poor. It not infrequently occurs as a complication of heart, lung or kidney-diseases. Death rarely, if ever, occurs from uncomplicated asthma, but frequent attacks sometimes produce emphysema or a heart-disease that may terminate in dropsy and death.

SYMPTOMS: The first attack, as a general rule, comes on suddenly, but succeeding ones are usually preceded by premonitory symptoms, such as cold, more or less tightness in the chest, slight impairment of digestion, or the passage of a greater quantity of urine than is natural, its being clear. With the exception of some or all of the symptoms just mentioned, the patient retires for the night feeling as well as usual. During the night, more commonly the after part, the patient is aroused from sleep by difficult breathing, which grows worse rapidly and is accompanied by wheezing and a tight cough. The face soon becomes flushed and if relief is not obtained it becomes bluish and the body covered with perspiration. The difficulty in breathing is so great that the patient rushes to the window or door or into the open air and either sits or stands leaning forward, thereby hoping to facilitate respiration, feeling as if death were his certain doom. The cough finally becomes looser, the

breathing easier and the paroxysm is soon at an end. A paroxysm may last only a few minutes or it may last for hours, while in rare cases, with slight remissions, it may continue indefinitely.

TREATMENT: The first thing to be considered in the treatment of asthma is the relief of the paroxysm. For this purpose 10 grains of Chloral Hydrate, repeated every half-hour until relief is obtained or four or five doses are given, is very efficient. The hypodermic injection of from $\frac{1}{4}$ to $\frac{1}{3}$ of a grain of the Sulphate of Morphine gives almost instantaneous relief. Care must be exercised in the administration of Chloral and Morphine not to allow the patient to become addicted to their use.

From 4 to 6 drops of the Nitrite of Amyl inhaled from a napkin may bring speedy relief. Its use will frequently abort an impending attack. The free use of strong Coffee without sugar or cream is also beneficial. Hot Whiskey in the form of a toddy sometimes affords marked relief. The hypodermic administration of 3 grains of the Citrate of Caffeine will frequently afford prompt relief. The following is highly recommended:

Nitrate of Soda,..... 24 grains,
Water,1 ounce.

Mix and give a half-teaspoonful every half-hour until relief is obtained or until three doses are taken.

The Tr. of Lobelia in half-teaspoonful doses every few minutes until relief is obtained or nausea produced is usually efficient.

The inhalation of the fumes of blotting paper that has previously been saturated with a concentrated solution of Saltpeter, then dried and burned, is sometimes very efficient in relieving a paroxysm. If it is used the atmosphere of the patient's room should be well filled with the fumes.

The leaves of Belladonna, Lobelia and Stramonium, when dried and then steeped in a strong solution of the Nitrate of Potash and then smoked, frequently affords relief. The inhalation of Chloroform or Ether is also efficient, however, great care must be exercised in the use of them.

With a view of making a permanent cure the following should be given:

Iodide of Potash,.....1 ounce,
Fl. Ext. of Grindelia Robusta,.....2 ounces,
Co. Syr. Stillingia, sufficient to make, 6 ounces.

Mix and give a teaspoonful after each regular meal, continuing its use, if necessary, for months. Should this fail the following may be tried:

Fl. Ext. of Grindelia Robusta,.....2 ounces,
Fl. Ext. of Lobelia,.....4 drachms,
Fl. Ext. of Sanguinaria,.....4 drachms,
Fl. Ext. of Senega,.....1 ounce,
Fl. Ext. of Skunk Cabbage,.....1 ounce,
Chloroform,1 ounce.

Mix and give a teaspoonful, in sweetened water, every fifteen to thirty-minutes until the paroxysm is relieved,

then, with a view of making a permanent cure, give it three or four times a day.

The general health of the patient must receive careful attention; all diseased conditions must receive appropriate treatment; and the stomach, bowels and kidneys kept, if possible, in a normal condition.

A change of climate will sometimes effect a cure where every thing else fails. If financially able, asthmatics should continue the search until the proper climate is found.

PNEUMONIA.

WINTER-FEVER, LUNG FEVER.

Pneumonia is an inflammation of the parenchyma, or substance, of the lungs; characterized by a marked chill, fever, headache, pain in the affected side, oppressed breathing and a cough with expectoration, first of a frothy mucus, soon becoming opaque and afterwards rusty.

Standard writers tell us that it is caused by the micrococcus lanceolatus of Frankel and that the disease is infectious, however, exposure to cold and wounds of the chest or lungs, by lowering vitality, or resisting power, predisposes to an attack. Those who use alcoholic liquors to excess are more subject to it than others. Men are more subject to it than women. One attack predisposes to another. Endemics and even epidemics of it occur. It may be croupous or catarrhal. The catarrhal form is known as capillary bronchitis. Where only a part of a lung is attacked it is called circumscribed or lobar pneumonia; where one entire lung is affected it is called single

pneumonia, and where both lungs are involved it is called double pneumonia.

SYMPTOMS: An attack may be preceded, for a day or two, by a feeling of languor and dullness, headache, loss of appetite, pain in the limbs and back, a quick, short, hacking cough, shortness of breath, with chilliness and more or less coldness of the extremities; but in the majority of cases it is ushered in abruptly with a well-marked chill, continuing one or two hours, and children may have convulsions. The symptoms mentioned above are at this time aggravated and the cough is dry and suppressed. The chill finally gives way, fever follows, the temperature usually reaching 103 to 105 degrees; the pulse is quick, full and strong, and the skin hot and dry. There is severe pain in the back and head; white coated tongue; constipated bowels and scanty high-colored urine, and a dull pain in the region of the nipple of the affected side, which is aggravated by breathing, coughing, or pressure, and it will be noticed that the patient prefers to lie on the affected side, or, if both lungs are involved, upon the back. Respiration is now hurried and imperfect and attended with unusual elevation of the shoulders and chest during each effort at inspiration. The cough, at first, is attended by the expectoration of a thin, frothy mucus, which soon becomes semi-transparent and so tenacious that the vessel containing it may be inverted without pouring it out. If the lungs at this stage are percussed, over the region involved, more or less dullness will be detected and this increases as the lung

becomes more hepatized (liver-like); and if the ear is applied to the chest, over the region where the dullness is detected, a minute crackling sound will be heard, resembling the sound made by throwing fine salt on live coals of fire, or the rubbing of hair between the fingers. In order to detect these sounds, as described, have the patient, while the ear is applied to his chest, take a few full inspirations. By the second or third day the material expectorated becomes rusty and more profuse, having the appearance of brick-dust.

The foregoing symptoms, with the exception of the pulse, which, towards the latter part of the attack, becomes quick and weak, or irregular, continue about the same until the fifth to the seventh day, when, in favorable cases the fever gives way and convalescence is established, the patient being greatly debilitated. As the fever gives way there is almost always profuse perspiration, a weak, irregular pulse and extreme weakness.

TYPHOID PNEUMONIA: This is pneumonia attended by the symptoms of typhoid fever such as severe prostration, nervousness, more or less delirium and the accumulation of sordes on the lips and teeth, the tongue's being red and dry. This condition may be present from the beginning of the attack, but more commonly the attack begins as an ordinary pneumonia, and this form is assumed after the first few days.

PLEURO-PNEUMONIA: This is pneumonia complicated with an inflammation of the pleura, a membrane

consisting of the covering of the lungs and lining the inner surface of the walls of the thorax. In these cases the breathing becomes more difficult, the pain more severe and of a sharp cutting character. See Pleurisy.

TREATMENT: Every drop of blood that circulates in the body goes directly from the heart into the lungs and from the lungs back to the heart and then to the various parts of the body when it is again returned to the heart and then to the lungs. Now, bear in mind that pneumonia is an inflammation of the substance of the lungs; then, is it not reason and common sense that if the heart's action is controlled, thereby lessening the amount of blood thrown into the inflamed lung-tissue and thus giving it rest, that the pain and engorgement to a great extent, will be controlled and the patient's chances for recovery greatly enhanced? We care nothing about the cause, whether it be germs, cold, or something else, what we have to contend with is the effect of a cause and this effect is inflamed lung-tissue. The old method of treating pneumonia was by bleeding and active cathartics, which is bleeding indirectly. Both are very exhausting, and were it not for this fact bleeding, directly, would yet be our very best treatment for pneumonia; but as the great majority of persons, who die with this disease die from weakness, all exhausting remedies or measures must be shunned as we would death itself. Bleeding relieved the inflamed lung-tissue by lessening the amount of

blood thrown to it. Now, we have remedies that will do the very same thing and not impair or destroy one drop of blood in the system, besides their effects may be discontinued or even counteracted whenever it is necessary. We refer to Aconite and Veratrum.

The authors of this work have practiced medicine almost an average life-time, and we hope the reader will pardon us when we say that we are absolutely proud of our records in this disease, and these remedies have been our sheet-anchor. As much as pneumonia is dreaded, its tendency, even without treatment, is to recovery.

If the pulse is too quick and too full, and the stomach not irritated, give Veratrum, and if there is flushed face with bright eyes and contracted pupils, add Gelsemium, also add small doses of Ipecac and Lobelia for the cough, thus:

Tr. of Veratrum Viride,.....	18 drops,
Fl. Ext. of Gelsemium,.....	27 drops,
Fl. Ext. of Ipecac,.....	18 drops,
Tr. of Lobelia,.....	36 drops,
Water,	18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while the pulse is too full and too quick. If the stomach is irritated give Aconite instead of the Veratrum, adding the other remedies. The dose of the Tr. of Aconite in this, as well as other diseases, is one drop.

If the patient is drowsy, the pupils being too large, Belladonna should be used instead of the Gelsemium, as follows:

Tr. of Aconite Root,.....	18 drops,
Fl. Ext. of Belladonna,.....	6 drops,
Fl. Ext. of Ipecac,.....	18 drops,
Tr. of Lobelia,.....	36 drops,
Water,	18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while the pulse is too quick and too strong. In addition to the Veratrum or Aconite, where the fever is high, the skin dry and the pulse strong and the patient not drowsy, from 3 to 5 grains of Acetanilide, should be given every three or four hours.

At the commencement of the attack if it is indicated, and it is usually, Calomel should be given, thus:

Calomel,	1 grain,
Bicarbonate of Soda,.....	10 grains,
Powd. Ipecac,.....	1 grain.

Mix and divide into five powders and give one every hour. If they fail to act mildly on the bowels give Oil, Salts or Seidlitz Powders.

The patient should have at least one action from the bowels each day. Where the bowels fail to act this often, Oil, Salts or Seidlitz Powders may be given.

Watch the action of the kidneys. If the flow of urine is scanty give 20 grains of the Acetate of Potash, or 20 to 30 drops of the Fl. Ext. of Buchu, every three or four hours as is necessary.

Where the fever is distinctly periodic, though in no other case, 4 or 5 grains of Quinine should be given every two hours during the remission.

Where the tongue is broad, pallid and uniformly coated with a filthy, whitish material, 20 grains of the Sulphite of Soda should be given every three or four hours until the tongue is clean or its color changed.

Where the tongue and mucous membrane are red, or red and dry, 3 drops of Hydrochloric acid should be given, in a half a glass of water, every four hours. Should the skin and eyes become yellow give from 20 to 30 drops of the Fl. Ext. of Chionanthus every four hours until every trace of yellowness has disappeared.

Where the pulse becomes weak or irregular or when it is in this condition from the beginning of the attack, Digitalis and Cactus should be given instead of the Veratrum or Aconite, adding the Lobelia and Ipecac for the cough, thus:

Fl. Ext. of Digitalis,.....	12 drops,
Fl. Ext. of Cactus, Grandiflorus, ..	24 drops,
Fl. Ext. of Ipecac,.....	12 drops,
Tr. of Lobelia,.....	24 drops,
Water,	12 teaspoonfuls.

Mix and give a teaspoonful every two hours until the pulse becomes normal. If the patient is drowsy, the pupils being too large, or where there is profuse perspiration $\frac{1}{3}$ of a drop of the Fl. Ext. of Bella-

donna should be added to each dose of the foregoing. If the pulse is very weak 1-40 of a grain of the Nitrate or Sulphate of Strychnine, or 1-100 of a grain of Nitroglycerine, should be given every three or four hours. From 20 to 30 drops of the Aromatic Spirits of Ammonia, given in a sup of water, every two or three hours is also a valuable stimulant in these cases. The use of Whiskey should not be neglected when the pulse is weak. The amount to be given must be determined by its effects on the heart. A few ounces during each twenty-four hours, will answer in some cases, while others may require ten or twelve ounces. It is best given in the form of egg-nog or milk-punch, however, the tastes of the patient may be considered.

The application of a small bag of hot salt to the affected side is usually all that is required for the relief of pain. The salt, when used, should be changed sufficiently often to prevent its becoming cool. Where the pain is very severe from 3 to 8 grains of Dover's Powder may be given every four or six hours, however, no more of it should be used than is actually necessary.

Where there is delirium, nervousness, or an inability to sleep, 10 grains of the Hydrate of Chloral should be given every half-hour or hour until sleep is produced or three or four doses are given.

Typhoid pneumonia requires no special treatment more than has already been outlined. See Pleurisy.

The temperature of the sick-room should be kept between 65 and 70 degrees Fahr. The diet should consist of such articles as milk, eggs, crackers, gruel and soups, however, tea and coffee may be allowed.

PLEURISY.

PLEURITIS.

Pleurisy is an inflammation of the serous membrane covering the lungs and lining the inner thoracic wall; characterized by a chill, fever, cutting pain in the side, difficult breathing and a dry cough. The inflammation may be acute or chronic, local or general, but is usually confined to one side.

It is caused by various micro-organisms or their irritating chemical products. Cold and exposure and injuries to the chest-wall are important predisposing causes. It is frequently associated with pneumonia, rheumatism, bronchitis, small-pox and tuberculosis. It occurs in both sexes and in all climates.

SYMPTOMS: An acute attack usually commences with a well-marked chill, followed by fever, thirst, quickened pulse, restlessness and a severe cutting pain in the side or chest, aggravated by breathing, coughing or lying on the affected side. The breathing, which is rapid and shallow, is carried on principally by the diaphragm and abdominal muscles. The pulse is usually full and quick, and the cough dry, short and hacking. The fever, with the exception of slight remissions of mornings, is continuous. The bowels are constipated, the skin hot and dry and the urine scanty

and high-colored. During this stage of the disease if the ear is applied to the chest over the affected region a slight creaking sound resembling that made by new leather may usually be heard.

Within a few days effusion occurs, when, the fever and pain subside to some extent, but the breathing, at this time, becomes more difficult, the cough more distressing and the pulse weak or irregular and the patient usually lies on the affected side. The effusion is so great in some cases that there is a protrusion of the skin between the ribs. Where both sides are involved, and the effusion profuse, death may occur from suffocation unless the fluid is promptly removed. With the absorption of the fluid the patient improves and convalescence is more or less rapid. In some cases the absorption of the fluid is slow and in these cases the patient may finally die of exhaustion.

In the chronic variety of the disease, or where the effusion is purulent, the patient is emaciated, there is loss of appetite, irregular chills, more or less fever, night-sweats, pains in the chest, difficult breathing and a dry hacking cough, which may, in some cases, be attended by the expectoration of a small amount of mucus. See Septicæmia.

TREATMENT: Control the fever with the indicated sedatives and, in addition to these, where the fever is high, the pulse full and strong and the skin dry, give from 3 to 5 grains of Acetanilide every three or four hours. If

it is indicated, and it usually is in these cases, give Calomel as follows:

Calomel,1 grain,
Bicarbonate of Soda,10 grains,
Powd. Ipecac,1 grain.

Mix and divide into five powders and give one every hour. If they fail to act on the bowels give Salts. The Improved Compound Cathartic Pills may be used if preferred, instead of the Calomel. The dose of them is two pills; give one and in an hour give the other one. The bowels should be kept open throughout the attack. For this purpose give Salts, when necessary.

Apply a small bag of hot salt to the painful region, changing it sufficiently often to prevent its becoming cool.

If the fever is periodic, but in no other case, give 5 grains of the Sulphate of Quinine every two hours during the remission, however, where the fever remains down after four doses are given, then administer it every three or four hours.

When the fever begins to subside give 20 grains of the Acetate of Potash every three or four hours until absorption is completed.

Where the effusion is so great that suffocation is threatened it must be removed at once. This may be accomplished with an aspirator. The needle should be inserted between the fifth and sixth ribs.

Where the disease assumes the chronic form apply a Compound Tar Plaster over the region involved

letting it remain as long as the patient can bear it, when, it should be removed until the irritation produced by it has subsided to some extent, when it must be applied again and thus continued until the patient completely recovers.

The absorption of the effused fluid may be promoted by the following:

Iodide of Potash,.....1 ounce,
Compound Syr. of Stillingia, sufficient
to make,.....6 ounces.

Mix and give a teaspoonful after each regular meal.

Should the fluid in the pleural cavity consist of pus (empyema), and this may be known by the irregular chills, fever, night-sweats, etc., it must be removed at once. This may be accomplished by making an incision into the pleural cavity, about an inch long, between the fifth and sixth ribs and then washing the cavity out with the following:

Permanganate of Potash,.....4 grains,
Water,.....1 pint.

Mix and inject into the pleural cavity with an ordinary syringe. The water must be boiled and then strained into a sterilized china-ware vessel before adding the Potash. It should be used warm. After washing out the cavity insert a soft rubber drainage tube and hold it in place with a bandage and a safety-pin. This precaution is necessary to prevent the tube's coming out or slipping into the pleural

cavity. The wash may be used once a week until pus is no longer formed in the cavity.

When the fever subsides the following tonic should be given until the patient's former strength is regained:

Fl. Ext. of Nux Vomica, 3 drachms,

Fl. Ext. of Hydrastis Can., 1 ounce,

Fowler's Solution of Arsenic, 1½ drachms,

Aromatic Elixir, sufficient to make, .6 ounces.

Mix and give a teaspoonful before each regular meal.

The diet in these cases should consist of such articles as bread, milk, oysters, soft-boiled eggs, beef-essence, soups and boiled meats.

HÆMOPTYSIS.

HEMORRHAGE OF THE LUNGS.

Hæmoptysis is the expectoration of pure or unmixed blood of a bright-red color from the lungs usually by coughing.

It is caused in a majority of cases by pulmonary tuberculosis, however, it may result from excessive action of the heart, congestion of the bronchial tubes, excessive exertion as straining, lifting, jumping, running, etc. The hemorrhage itself rarely produces death except where it is the result of heart-disease, or the rupture of the aorta.

SYMPTOMS: Hemorrhage from the lungs in a great majority of cases is preceded by evidences of impaired health. There is usually a sensation of warmth and oppression in the chest, and tickling in the throat; or there is, in rare instances, palpitation of the heart,

slight difficulty in breathing, with dizziness. Upon coughing the patient's mouth is filled with bright, red, frothy blood or if the hemorrhage is profuse the blood is raised without coughing. The patient's alarm, which is great from the beginning of the attack, is usually increased by the excitement of friends, and this assists in causing the extreme prostration seen in such cases. The attack may last from a few minutes to as many hours; the amount of blood lost varying from a few drops to as many pounds, however, the average quantity being from an ounce to a pint. In rare cases from a few drops to a tablespoonful of blood may be expectorated occasionally for several days and then, gradually cease.

TREATMENT: The patient should be put to bed in a well-ventilated room, the head and shoulders elevated, all excitement avoided and Ergot and Rhus Aromatica given, thus:

Fl. Ext. of Ergot,.....4 drachms,

Fl. Ext. of Rhus Aromatica,.....4 drachms.

Mix and give from twenty to sixty drops every twenty or thirty minutes until the patient is relieved. Should the foregoing not be at hand give common Salt (Chloride of Sodium) freely. If the feet are cold bathe them in warm water and apply heat to them.

Where the hemorrhage is caused by excessive action of the heart, which is indicated by a strong, full pulse, give one drop of the Tr. of Veratrum Viride

every half-hour until relieved or the heart's action is reduced. After relief is obtained all active exercise must be avoided for a few days.

EPISTAXIS.

HEMORRHAGE OF THE NOSE.

Epistaxis, or bleeding from the nose, may be from one or both nostrils and is so common that a description of it is thought to be unnecessary. All ages are subject to it.

TREATMENT: Where the hemorrhage is slight no treatment is necessary, however, if there is danger on account of the loss of blood, apply cold water to the back of the neck, the forehead and nose and plug the bleeding nostril with cotton moistened with strong Alum-water, or a saturated solution of Tannin. The Alum-water, or solution of Tannin, may be injected into the nose. Monsell's Solution of Iron, slightly diluted, or even full strength, may be used in the same manner.

Where the foregoing means fail, the posterior nares should be plugged with a soft piece of sponge or cotton, by means of a string fastened to it, which should be passed up through the nostril and drawn out through the mouth until the sponge or lint comes in contact with the bleeding surface.

PHTHISIS PULMONALIS; TUBERCULOSIS.

CONSUMPTION.

Consumption or tuberculosis is an infectious disease; characterized by a progressive failure of the health

fever, cough night-sweats, diarrhoea, difficult breathing, emaciation, exhaustion and usually death. There is a deposition in the lungs of morbid bodies of a yellowish, cheesy substance, called tubercles, which undergo ulceration and softening, degenerating into pus or an ichorous material destroying more or less lung-tissue, thus forming cavities and rendering the lungs incapable of performing their proper function. The deposit of tubercles usually occurs at one of the apices of the lungs. Deposits may also occur in the brain, liver, joints, intestines, lymphatic glands, mesentery, and, in fact, almost any organ or tissue of the body. This, however, is more common in children than in adults.

The disease is caused by the bacillus tuberculosis, and is not confined to any age, however, it is more frequently developed between the ages of fifteen and thirty years. The principal remote cause of it being a weakened condition of the system, which favors the development of the bacillus, transmitted from the parent to the child. The disease is not infrequently acquired by persons, who are not thus predisposed. It is an undeniable fact that the husband has contracted the disease from the wife and the wife from the husband and instances of the spread of the disease in factories, prisons and the contraction of it by physicians, nurses and attendants, are not rare. The chief source of the bacillus is the expectorated material (sputum) of tuberculous patients. In the advanced stage of the disease

several billions of the bacilli are expectorated daily by each patient, and the dried sputum is wafted into the atmosphere in the form of dust-like particles containing innumerable bacilli, thus furnishing abundant opportunity everywhere for infection. The disease is not uncommon in cattle and man may be infected through the milk of diseased animals.

SYMPTOMS: In the first, or incipient stage, there is an impairment of the general health; more or less indigestion; some difficulty in breathing, perhaps amounting to a shortness of breath, more especially on taking exercise. Cough is usually a very early symptom; it may be slight and hacking at first, but gradually becomes more and more distressing and frequent; at first it is dry, but is soon attended by an expectoration of a thin frothy character, or it may resemble mucus, and is not infrequently streaked with blood. In some cases the first observable symptom is a more or less profuse hemorrhage from the lungs. Slight, transient pains are felt in various parts of the chest; slight depressions, just below the collar bones, are sometimes present; the hair looks dry and dead; the nails curve inwards and a red line may appear near the margin of the gums. As the disease advances the breathing becomes more difficult; the cough more severe and distressing; the skin hot and dry with burning sensations in the palms of the hands and soles of the feet. The appetite is variable and capricious; the bowels irregular; the urine turbid; the

pulse quicker than usual; the tongue clean, or furred, white in the center and red at its tip and edges, and night-sweats are met with even in this stage of the disease. The fever is usually of a remittent character, the remission occurring towards evening. In some cases, there are two exacerbations of the fever daily; one about noon and the other during the night, usually terminating in profuse perspiration. These symptoms vary with different patients, according to the extent of the disease and the several modifying circumstances to which patients are exposed.

In the second stage of the disease the expectoration contains small cheese-like particles of a light-yellowish color, owing to softening of the tubercles. The cough increases in severity and is more frequent; breathing is more hurried and difficult; chilly sensations, which were felt in the first stage, now amount to actual chills. These occur usually in the latter part of the day and are followed by fever and profuse morning perspiration. Towards evening the face is usually flushed; the pulse rapid; the appetite fails; the features are sharp; there is a sense of constriction in the chest; debility and emaciation are now prominent symptoms and deep inhalations or a fit of coughing frequently induce more or less pain in the chest. Hemorrhage from the lungs, owing to the erosion of small blood vessels by ulceration, is common in this stage. It should be remembered, however, that hemorrhage from the lungs is not a posi-

tive sign of consumption as it occasionally occurs as an independent affection. In many cases an obstinate and debilitating diarrhœa occurs, which assists still further to weaken the patient. Pains in the bowels, irregular chills, hectic fever, thirst and night-sweats, are very common, but, as in the first stage, all the symptoms vary in different individuals.

In the third stage, all the preceding symptoms are aggravated; the breathing is short and hurried; the pulse rapid; the cough almost constant and very distressing; the voice weak and hoarse; the expectoration purulent and the emaciation and debility very much increased. The feet and ankles swell; diarrhœa continues obstinate and unyielding; and a few weeks before dissolution the mouth is attacked with aphthous ulceration, and in rare instances there is delirium. More generally, however, the senses remain to the end not much impaired, and a characteristic symptom of the disease is that those afflicted with it are seldom apprehensive of danger, but flatter themselves with a speedy recovery.

In the last stage, the difficulty in breathing is often excessive; the voice sinks to a whisper; bed-sores form and add much to the suffering. Death may occur in several ways; from debility, the most common; from peritonitis, brought on by ulceration of the bowels; from congestion of the lungs; from hæmoptysis; or from an accumulation of air in the pleural cavity.

TREATMENT: Can pulmonary tuberculosis in any of its stages be cured? With due respect for those who claim to the contrary, experience teaches us to answer, emphatically no. As the disease, when once established, is incurable, every precaution should be used to avoid its contraction. Any one, however robust, may contract the disease. Our greatest danger is from the expectoration of those afflicted with it. Consumptives should never expectorate except into some receptacle, which should be carried with them wherever they go, and the sputum burned or boiled before being thrown out. Patients should be thoroughly instructed as to the necessity of this precaution, as the observance of it, in all probability, will save near and dear friends from filling untimely graves from the effects of this most terrible malady. Persons predisposed to or afflicted with the disease should spend as much time as possible, during good weather, in the open air, and their sleeping apartments must be well ventilated. Sudden changes in temperature, hot, crowded rooms, and all other influences that are liable to impair the general health, must be studiously avoided; and persons afflicted with the disease should be instructed to avoid the swallowing of their sputum. Children born of consumptive or scrofulous mothers should be supplied with a healthy wet-nurse, or if this is impossible, the fresh milk of a healthy cow is our best substitute for the mother's milk. See Care of the Infant. Those predisposed to the

disease should have the greatest possible care taken of them and appropriate tonics administered during convalescence from acute diseases; and any impairment of the general health must be promptly remedied. No one, under any circumstances, should sleep in the room with a consumptive.

A change of climate is of the greatest prophylactic importance to children or others, who are predisposed to, or afflicted with the disease. Let them be removed from the city to the country or to the mountains. It should be borne in mind, however, that that there is no specific influence in any climate. Observation shows that different climates are suited to different persons. The advantages belonging to climate are altitude, uniformity and dryness. A dry climate is usually preferable, but some patients do better in a warm, humid atmosphere. With respect to temperature, a uniform, cold climate is better for some patients, and a uniform, warm climate for others. In selecting a climate the choice and feelings of the patient should have considerable weight. If, when in health, more vigor and enjoyment is experienced in summer than in winter, then, a warm climate will probably be better, and, if the reverse is true, a cold climate should be chosen.

The place selected should contain resources for occupation and mental interest; and as much time as possible should be spent in the open air; however this must be postponed when the patient has fever.

When a place become tiresome it is best to remove the patient from it. Patients, who are dependent on the association of friends for their happiness are not likely to be benefited by being sent away, especially if alone and among strangers. It is cruelty to send to a distance, patients who are in a condition admitting of but little prospect of improvement, and, who will probably never live to return.

The diet of consumptives and those predisposed to it should be of the most nutritious character, consisting of such articles as soups, milk, butter, eggs, beef, pork, mutton, fish, fowl, fresh vegetables, cereals and fruits. Coffee and tea may be allowed in moderate quantities.

By wearing flannel the entire year and adopting the methods here outlined the disease may be avoided to a great extent and the lives of those who are suffering with it in its incipient stage may be greatly prolonged.

Control the fever with sedatives, administered according to indications, in this as in any other disease. If the fever is high and the pulse full and strong from three to five grains of Acetanilide may be given every three or four hours. The daily tepid bath, followed by brisk friction with a coarse towel, is very beneficial, especially while the patient is having fever.

Where there is debility and loss of appetite, give the following:

Fl. Ext. of Nux Vomica,.....3 drachms,
 Fl. Ext. of Hydrastis Can.,1 ounce,
 Fl. Ext. of Gentian,.....3 ounces,
 Fowler's Solution of Arsenic,.....1½ drachms,
 Aromatic Elixir, sufficient to make,.6 ounces.

Mix and give a teaspoonful before each regular meal. The only objection to this prescription is its bitter taste; this, however, may be avoided by having the remedies put into sugar-coated tablets. When this is done the Aromatic Elixir should be omitted.

Cod Liver Oil, in teaspoonful-doses, three or four times a day in the absence of fever, and where it does not disagree with the stomach, is highly extolled, but it certainly possesses very little, if any, value as a remedy, and as a food it is far inferior to good, fresh, sweet cream or unskimmed milk.

The Syrup of the Hypophosphites of Lime, Soda and Potassium, of the U. S. P., is a very good tonic in these cases and may be given in doses of from one to four teaspoonfuls three or four times a day, however, it will be found inferior to the tonic previously mentioned.

Where digestion is feeble the following should be given:

Pure Pepsin,.....10 grains,
 Pancreatin,.....10 grains.

Mix and give at one dose after each meal.

Cough is a very troublesome symptom in consumption, but does not demand special treatment

unless it is so severe that it produces vomiting or prevents the patient from procuring the required amount of sleep. Where the cough is dry the following should be used:

Chloroform,	$\frac{1}{2}$ drachm,
Creosote,	$1\frac{1}{2}$ drachms,
Terebene,	$1\frac{1}{2}$ drachms,
Eucalyptol,	1 drachm,
Alcohol, sufficient to make,.....	1 ounce.

Mix and inhale from 10 to 20 drops of it, by means of an inhaler, several times a day, as is required, to control the cough. A bath in warm water, the temperature being about 100 degrees Fahr., after which, drying the patient with considerable friction, and requiring him to remain perfectly quiet for a few hours is also highly recommended and should be given a trial. Should the foregoing means fail to control the cough, or where it is loose, the following should be used:

Sulphate of Codeine,.....	8 grains,
Dilute Hydrocyanic Acid,.....	48 drops,
Syrup of Tolu,.....	3 ounces.

Mix and give a teaspoonful every four hours as is required.

Or:

Chloride of Ammonia,.....	3 drachms,
Whiskey,	4 drachms,
Glycerine,	4 drachms,
Paregoric,	1 ounce,

Chloroform-Water, 1 ounce,
 Syrup of Wild Cherry, sufficient to
 make, 6 ounces.

Mix and give a teaspoonful every three or four hours as is required. Should the foregoing means fail to control the cough the Sulphate of Morphine will have to be given. The dose should not be larger than is required to give rest.

Nauseating expectorants should not, under any circumstances, be administered to consumptive patients as they interfere with digestion, thereby doing a great deal more harm than good.

For the hectic fever and night-sweats give Quinine and an infusion of common Sage. Should these fail to afford relief give 15 or 20 drops of the Aromatic Sulphuric Acid, well diluted with water, three or four times a day. The Oxide of Zinc in 2-grain doses, three times a day is very efficient in these cases. The Sulphate of Atropine in 1-60-grain doses, or Agaricine in 1-20-grain doses at bed-time is also efficient.

Diarrhoea, when present, may usually be controlled with such remedies as the Subnitrate of Bismuth, Tannin, Bayberry and the Fl. Ext. of *Pinus Canadensis*. The following is also valuable in these cases:

Sugar of Lead, 18 grains,
 Gum Opium, 3 grains.

Mix and put into six capsules and give one every four to six hours as is required to control the bowels.

Whiskey, if it does not disagree with the patient, may be used in any stage of the disease, and is a very beneficial remedy in some cases.

EMPHYSEMA.

Emphysema is a rupture or enlargement of the air-cells of the lungs; characterized by enlargement of the chest, difficult breathing with prolonged expiration and finally blueness of the surface and dilatation of the heart. There are two forms of the disease recognized; interlobular and vesicular. In the first there is a rupture of the air-cells; and, in the latter there is a dilatation or over-distention of the air-cells with enlargement of the lungs.

Its most common causes are wounds of the chest, over-exertion, whooping-cough, bronchitis, asthma and the blowing of wind-instruments. The remote cause of it is a hereditary weakness of the lung-tissue.

SYMPTOMS: Difficult breathing is one of its leading symptoms and is greatly aggravated by active exercise. In health, expiration is much shorter than inspiration. In emphysema this is reversed, expiration being much longer than inspiration. There is enlargement of the chest, increased resonance on percussion and in severe cases more or less blueness of the lips and skin, caused by an impeded circulation of the blood, thereby preventing a proper oxygenation

of this fluid. Emphysema is usually associated with some other disease as bronchitis, asthma, etc.

TREATMENT: The disease is incurable, therefore, all that can be done is to adopt appropriate treatment for the various complications. See Bronchitis, Asthma, Dilatation of the Heart, and Dropsy.

PART IV.

DISEASES OF THE CIRCULATORY SYSTEM.

The circulatory system consists of the heart, pericardium, endocardium, arteries, capillaries and veins.

PERICARDITIS.

Pericarditis is an inflammation of the membrane containing or surrounding the heart; characterized by fever, pain, anxiety, a sensation of suffocation and more or less disturbance of the heart's action.

The inflammation may be primary or secondary, acute or chronic.

When it occurs as a primary disease it is usually the result of injuries to the chest-wall or cold and exposure.

When it occurs as a secondary disease it follows or is associated with rheumatism, tonsillitis, la grippe, scarlet fever, small-pox, diphtheria, measles, puerperal fever, tuberculosis, septicæmia, Bright's disease, gout, scurvy, or diabetes; and in alcoholics it is not infrequently associated with pneumonia and pleuro-pneumonia.

SYMPTOMS: An attack usually commences with a well-marked chill, which is followed by fever of a

remittent type. The pulse, in most cases, is quick, full and strong; the skin hot but usually moist; the bowels constipated and the urine scanty and high-colored. There is acute, shooting pains in the region of the heart, which is aggravated by breathing, coughing, pressure or lying on the left side.

In some cases, more especially those of a chronic character, there is pain in the left shoulder sometimes extending down the arm to the elbow or wrist. There is slight cough, more or less difficulty in breathing and a feeling of oppression and anxiety.

When effusion occurs, which may be any time between the first and fourth days, there is increased dullness on percussion over the region of the heart, a diminution in the heart-sound, quick, weak, or irregular pulse, great difficulty in breathing, more or less delirium, a tendency to syncope, hiccough and sometimes vomiting. Absorption is usually rapid, but the heart remains irritable for a long time. Should absorption not occur, the fluid accumulates and where life is not destroyed the pericardial sack becomes dilated and chronic pericarditis follows. An attack of the disease occurring as a secondary affection presents no marked symptoms other than those just mentioned.

TREATMENT: This should be commenced by the administration of sedatives according to indications. Where the pulse is full and strong and the stomach not irritated give *Veratrum* and if there is flushed

face, the pupils being too small, add Gelsemium as follows:

Tr. Veratrum Viride,.....18 drops,
Fl. Ext. of Gelsemium,.....27 drops,
Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half or two hours while there is fever.

Where the stomach is irritated give Aconite instead of the Veratrum, and, if indicated, add the Gelsemium, thus:

Tr. of Aconite Root,.....18 drops,
Fl. Ext. of Gelsemium,.....27 drops,
Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half or two hours.

If the patient is drowsy, the pupils being too large, Belladonna should be given instead of the Gelsemium, as follows:

Tr. of Aconite Root,.....18 drops,
Fl. Ext. of Belladonna,.....6 drops,
Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half or two hours while there is fever. Keep the head cool and the feet warm.

If the pulse is weak or irregular give Digitalis and Cactus instead of the Veratrum or Aconite and if indicated add the Belladonna, thus:

Fl. Ext. of Digitalis,.....18 drops,
Fl. Ext. of Cactus Grandiflorus,....36 drops,

Fl. Ext. of Belladonna,.....6 drops,
Water,18 teaspoonfuls.

Mix and give a teaspoonful every two hours.

Should this fail to improve the heart's action 20 to 30 drops of the Aromatic Spirits of Ammonia should be given, in a sup of water, every two or three hours, and if necessary the 1-40 or 1-30 of a grain of the Nitrate or Sulphate of Strychnine may also be given every three or four hours.

At the commencement of the attack an Improved Compound Cathartic Pill may be given, and if it fails to act on the bowels give Oil, Salts, or a Seidlitz Powder. Keep the bowels open throughout the attack. For this purpose the three last-named remedies may be used.

The kidneys should act freely throughout the attack and the following will accomplish this:

Acetate of Potash,.....5 drachms,
Water,.....6 teaspoonfuls.

Mix and give a teaspoonful every four hours as is required.

The fever is sometimes distinctly periodic; in these cases 5 grains of the Sulphate of Quinine should be given every two or three hours during the remission.

Should there be coldness of the feet, at any time during the attack, bathe them in strong Mustard-water as hot as it can be borne, after which wrap them well with a blanket and apply heat to them in

the form of hot irons, bricks, rocks, etc. Where the pain is very severe 6 or 8 grains of Dover's Powder or from the $\frac{1}{8}$ to the $\frac{1}{4}$ of a grain of the Sulphate of Morphine may have to be given every three or four hours.

If the patient is delirious Hydrate of Chloral should be given in 10-grain doses every hour, in a sup of Mint-water, until its effects are obtained, when, it should only be administered as demanded.

Where there is œdema (swelling) of the face or extremities, 3 or 4 drops of the Fl. Ext. of Apocynum Cannabinum should be given four times a day.

Where the disease arises as a secondary affection in addition to the foregoing treatment, appropriate treatment should be used for the original disease.

ENDOCARDITIS.

Endocarditis is an inflammation of the serous membrane lining the cavities of the heart and aiding in forming its valves; characterized by more or less fever, cough, difficult breathing, nausea, vomiting and disturbed heart's action. There are two forms of it; the acute and the chronic.

The causes of it are the same as those of pericarditis, however, it might be added that the disease is not infrequently associated with chorea. That the disease is a microbic affection is gaining ground.

SYMPTOMS: The symptoms are very much the same as those of pericarditis, only, it may be stated, that where the inflammation is confined to the endo-

cardium, pain is rarely felt, though the patient complains of great oppression, anxiety and faintness. It could not be expected, neither is it necessary, that the unprofessional attempt to make a differential diagnosis between this and pericarditis as the treatment of the two diseases is the same.

TREATMENT: Require the patient to assume the recumbent position and remain perfectly quiet; and in addition to the treatment recommended for pericarditis, appropriate remedies should be administered for the original disease.

ACUTE MYOCARDITIS OR CARDITIS.

ACUTE INFLAMMATION OF THE HEART.

This, as its name indicates, is an acute inflammation of the muscular tissue of the heart; characterized by pain, fever, weak heart-action, symptoms of blood poisoning and great prostration.

It usually results from pericarditis, endocarditis, septicæmia, typhoid fever, or an obstruction of the coronary arteries.

SYMPTOMS: These are frequently very obscure, however, if, during the course of the diseases mentioned, there are developed pain in the region of the heart, difficult breathing, a weak or irregular pulse with fever of a low typhoid type and irregular chills or rigors, the disease may be suspected.

TREATMENT: Perfect rest in bed and the treatment recommended for pericarditis together with proper treatment of the original disease.

CHRONIC MYOCARDITIS OR CARDITIS.

CHRONIC INFLAMMATION OF THE HEART.

This is a gradually developing inflammation of the interstitial connective tissue of the heart resulting in hardening of this organ; characterized by pain in the heart, shortness of breath on slight exertion, attacks of irregular action of the heart and dizziness.

It may be a result of acute myocarditis, pericarditis, endocarditis, or syphilis, alcoholism and diseases of the kidneys, but its most common cause is a hardening of the coronary arteries, or valvular insufficiency, leading to a deficient blood supply to the muscles of the heart. It is a disease of the aged, however, cases are met with in the young.

SYMPTOMS: One of the earliest symptoms of the disease is extreme shortness of breath with palpitation of the heart and a weak pulse, upon slight exertion. Attacks of pain in the heart or a sensation of constriction or pressure over the region of the heart are not infrequent, often following slight exertion or indigestion. In some cases, presenting no other symptom, the pulse-rate is decreased to fifty or even thirty per minute. Fainting without warning or after sudden exertion, on account of a lessened supply of blood to the brain, is common.

As the disease advances the heart grows weaker, the shortness of breath increases and there is cerebral weakness showing itself as mania, delusional attacks or dementia. If the region of the heart is percussed,

dullness is detected and murmurs, the result of valvular lesions may usually be detected by auscultation; and a characteristic point is the irregularity of the heart's action, one contraction being forcible and another weak or feeble. The disease is one great cause of heart-failure.

TREATMENT: The disease is incurable, but life may be greatly prolonged and made more comfortable by adopting the treatment herein given.

Persons suffering with chronic myocarditis should avoid mental worry and over-exertion and eschew alcoholic liquors.

Where the general health and digestion are impaired the following should be given:

Fl. Ext. of Nux Vomica,.....	3 drachms,
Fl. Ext. of Hydrastis Can.,	1 ounce,
Fl. Ext. of Gentian,.....	3 ounces,
Fl. Ext. of Cactus Grand.,	2 drachms,
Fowler's Solution of Arsenic,....	1½ drachms,
Aromatic Elixir, sufficient to make,	.6 ounces.

Mix and give a teaspoonful before each regular meal.

Attacks of shortness of breath may usually be relieved by 30 to 60-drop doses of the Aromatic Spirits of Ammonia repeated every hour or so as the urgency of the case demands. From the 1-40 to the 1-30 of a grain of the Nitrate of Strychnine or 1-100 of a grain of Nitro-Glycerine, preferably hypodermically, every three or four hours, is very efficient in these cases.

Where the heart's action is rapid and weak or irregular the following should be given:

Fl. Ext. of Digitalis,.....48 drops,
 Fl. Ext. of Cactus Grand.,.....2 drachms,
 Fl. Ext. of Nux Vomica,.....2 drachms,
 Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful four times a day; early of a morning, the middle of the morning, the middle of the evening and at night.

If the urine is scanty give the following:

Acetate of Potash,.....1 ounce,
 Water, sufficient to make,.....4 ounces.

Mix and give a teaspoonful, in a sup of water, every four or five hours as is required.

If the bowels are constipated from 10 to 30 drops of the Fl. Ext. of Cascara Sagrada should be given before each regular meal, regulating the dose according to its effects on the bowels.

Pain, when severe, may be relieved by the hypodermic injection of from the $\frac{1}{8}$ to a $\frac{1}{4}$ of a grain of the Sulphate of Morphine.

When fainting occurs place the patient in bed, lower the head and administer Strychnine, Aromatic Spirits of Ammonia and other stimulants.

The diet should be nutritious, but all articles that disagree with the stomach must be prohibited. Patients that are addicted to the use of tea, coffee or tobacco may be allowed to use them sparingly.

VALVULAR DISEASES OF THE HEART.

Diseases of the valves of the heart include all those conditions in which there are changes in the structure of the valves or of the orifices. The valves may be so changed as to be incapable of closing the orifice, and thus some of the blood flows back behind the valves, giving rise to a condition commonly called regurgitation or insufficiency. In other cases the orifices may be contracted, or the valves may be thickened, so as to obstruct the flow of blood, a condition that is called stenosis. These changes may take place at the opening between the left auricle and left ventricle, guarded by the mitral valve; at the opening into the aorta, guarded by the aortic semi-lunar valve; at the opening between the right auricle and right ventricle, guarded by the tricuspid valve; and at the opening into the pulmonary artery, guarded by the right semi-lunar valve.

SYMPTOMS: When the mitral valve and orifice are affected by stenosis, the pulse is small and sometimes irregular; there is difficulty in breathing, cough, mucous secretions from the bronchial tubes, and sometimes bloody sputa or hemorrhage from the air passages; the right cavities of the heart are dilated; the veins of the body are congested by sluggish circulation, thus giving the mucous membranes and skin a bluish tinge; the liver is enlarged; abdominal dropsy sets in; the feet and ankles become swollen and puffy, indicating general dropsy, which soon becomes severe; the urine is scanty and contains albumen.

In regurgitation, or insufficiency at the mitral orifice, an uneasiness is felt in the region of the heart; palpitation is almost constant; cough and difficulty in breathing occur; the pulse is small, irregular and intermittent; the feet and legs become dropsical; the cavity of the abdomen fills with fluid; the urine is scanty and loaded with albumen; and when death occurs the patient is literally drowned by the accumulation of fluid in the cavities of the body.

In stenosis of the aortic valve, the pulse is hard, small and slow; there is headache, vertigo, and fainting; sometimes a sudden relaxation or prostration; difficulty in breathing comes on at intervals; bleeding from the lungs sometimes occurs; and attacks of neuralgia of the heart are developed.

“In aortic regurgitation the beats of the pulse are sudden and rapid; headache is present a good deal of the time, the pains being of a throbbing character, and associated with dizziness and ringing in the ears; and after a time these symptoms may be modified, and no more serious ones may develop for years.”

“Diseases of the right auriculo-ventricular opening are rare, and when they do occur they are associated with other conditions, and present the same general symptoms.”

“The opening into the pulmonary artery may be deformed at birth, or may occur as a result of inflammation of the lining membrane of the cavities of the heart. Either stenosis or regurgitation, at this point, produces the same general results.”

"As a general rule in all cases of stenosis, when the ear is placed over the region of the heart, a sound resembling that made by a rip-saw is heard; while in regurgitation, the sound resembles that made by a bellows."

"While the first symptoms of the various forms of valvular diseases of the heart are characteristic and decided, yet as the diseases progress, the heart accommodates itself to the new condition, and dilatation and hypertrophy of its several parts take place. This is called compensatory change and after it occurs the patient may be comparatively well for a long period of time. When this compensatory action is overcome by over-work, worry or any other cause, the symptoms of both stenosis and regurgitation are developed; and in the severer cases, the general symptoms of dropsy, albumen in the urine, difficulty in breathing, etc., come on, no difference what may have been the form of the original disease."—Gunn.

TREATMENT: Patients suffering with valvular disease of the heart must avoid all excitement, mental worry and over-exertion. The use of alcoholic stimulants must be positively prohibited, and the use of tobacco, tea and coffee, if used at all, must be very moderate.

The bowels, when constipated, may usually be regulated by eating freely of cooked fruits and vegetables. Should this fail to regulate them from 10 to 30 drops of the Fl. Ext. of Cascara Sagrada should be given three times a day, regulating the dose according to its effects on the bowels.

If there is scantiness of urine give 20 grains of the Acetate of Potash, in a sup of water, four or five times a day as is necessary to obtain the desired results. If the pulse is weak or irregular give the following:

Fl. Ext. of Digitalis,.....48 drops,

Fl. Ext. of Cactus Grand.,.....2 drachms,

Fl. Ext. of Nux Vomica,.....2 $\frac{1}{4}$ drachms,

Fl. Ext. of Gentian,.....3 ounces,

Aromatic Elixir, sufficient to make,...6 ounces.

Mix and give a teaspoonful four times a day; early of a morning, the middle of the morning, the middle of the evening and at night.

Difficult breathing, when present, may be relieved by Aromatic Spirits of Ammonia in from 30 to 60-drop doses every hour or so as the urgency of the case demands.

The Sulphate or Nitrate of Strychnine in doses of from 1-40 to 1-30 of a grain, or the Sulphate of Sparteine in doses of $\frac{1}{6}$ of a grain, every four hours, is very efficient in these cases.

Where there are symptoms of dropsy, such as swelling or puffiness of the feet and ankles, or other parts of the body, give 3 drops of the Fl. Ext. of Apocynum Cannabium four or five times a day. For the further treatment of dropsy the reader is referred to that disease (?).

HYPERTROPHY OF THE HEART.

ENLARGEMENT OF THE HEART.

Hypertrophy of the heart is an increase in the size of this organ, resulting from an over-growth of its muscular

tissue; characterized by forcible action of the heart; unusual fullness of the arteries; less blood than natural in the veins, pulsating carotids and headache.

In simple hypertrophy there is an increase in the thickness of the walls of the heart. In what is known as eccentric hypertrophy, in addition to the thickening of the walls, there is also a dilatation of its cavities. There is another form of hypertrophy, known as concentric, but it is exceedingly rare. It is an increase in the thickness of the walls of the heart and a decrease in the size of its cavities.

The principal causes of it are valvular diseases of the heart; diseases of the arteries; Bright's disease of the kidneys; emphysema; continued over-exertion and the excessive use of alcoholic liquors, tea, coffee and tobacco.

SYMPTOMS: There is shortness of breath, especially on the slightest exertion; palpitation of the heart, sometimes exceedingly severe; headache; ringing in the ears, often dizziness; congestion of the face and eyes; bleeding from the nose; dry cough; and the patient restless during the night with more or less jerking of the limbs. The pulse is full and strong and if there is no dilatation of the cavities of the heart the entire body shakes at each pulsation. In most cases, sooner or later, there is a dropsical condition, which is known by a swelling or puffiness of the feet and legs. Finally, on account of the great difficulty in breathing, the patient becomes unable to assume the recumbent position and death soon closes the scene.

TREATMENT: In order to control the heart's action give 2 or 3 drops of the Tr. of *Veratrum Viride*, or the same amount of Tr. of *Aconite Root*, every four hours while the pulse is too full and too strong. Keep the bowels slightly open and the kidneys acting freely. The administration of from 10 to 30 drops of the Fl. Ext. of *Cascara Sagrada*, before each regular meal, will keep the bowels in good condition; while 20 grains of the Acetate of Potash, given in water, every four hours on alternate days, will be all that is required for the kidneys.

All active physical exertion or mental worry must be avoided; and the use of alcoholic spirits, tobacco, tea and coffee, when used, must be abandoned; the diet should be light, and, if possible, the recumbent position should be assumed several hours during each day. See Dropsy.

DILATATION OF THE HEART.

This is an increase in the size of one or more cavities of the heart; characterized by feeble pulse, blueness of the lips, fullness of the veins, a dropsical condition of the feet and legs, and sometimes the abdomen and finally exhaustion. It may occur and the walls of the heart remain normal, or they may be thinned or hypertrophied.

The most common causes of it are valvular disease, over-exertion, especially in those who possess feeble resisting powers; emphysema; chronic bronchitis, gout, Bright's disease of the kidneys; the excessive use of alcoholic liquors and syphilis.

SYMPTOMS: A characteristic symptom of dilatation of the heart is a weak, rapid irregular pulse with head-

ache, aggravated by the upright position. The veins are full and the arteries rather empty, producing more or less blueness of the surface. Shortness of breath and attacks of dizziness with fainting are common. There is frequently indigestion, constipated bowels, scanty, albuminous urine, jaundice, slight hacking cough and more or less dullness of the mind. Dropsy with exhaustion finally supervenes ending in dissolution.

TREATMENT: Where the pulse is weak or irregular, give the following:

Fl. Ext. of Digitalis,48 drops,

Fl. Ext. of Cactus Grandiflorus, ...2 drachms,

Aromatic Elixir, sufficient to make, ..6 ounces.

Mix and give a teaspoonful four times a day; early of a morning, the middle of the morning, the middle of the evening and at night.

If the patient is debilitated and the digestion feeble, give the following instead of the foregoing:

Fl. Ext. of Digitalis,48 drops,

Fl. Ext. of Cactus Grand., 2 drachms,

Fl. Ext. of Nux Vomica,2 $\frac{1}{4}$ drachms,

Fl. Ext. of Gentian,3 ounces,

Aromatic Elixir, sufficient to make, ..6 ounces.

Mix and give a teaspoonful four times a day. If there is swelling or puffiness of the feet or ankles add 3 or 4 drops of the Fl. Ext. of Apocynum Cannabinum to each dose of the foregoing.

For the attacks of dizziness and fainting put the patient to bed, lower the head and give from 30 to 60 drops

of the Aromatic Spirits of Ammonia every hour or so as the urgency of the case demands. Where the heart's action is very weak it may be necessary to give the Nitrate of Strychnine or the Sulphate of Sparteine every three or four hours. The dose of the first named is from the 1-40 to the 1-30 of a grain and the latter $\frac{1}{6}$ of a grain. Strychnine is made from Nux Vomica, therefore, both remedies should not be administered to a patient at the same time as there would be danger of obtaining the poisonous effects of them.

The bowels must be kept well regulated, and for this purpose from 10 to 30 drops of the Fl. Ext. of Cascara Sagrada should be given three times a day as is necessary.

If there is scantiness of urine give 20 grains of the Acetate of Potash four or five times a day.

The patient should take daily exercise in the open air, but fatigue or excitement must be avoided. The free use of good red wine is beneficial.

The diet should be of the most nutritious character.

FATTY DEGENERATION OF THE HEART.

This is a change of the muscular tissue of the heart into fat; characterized by feeble action of the heart, fullness of the veins, especially those of the neck, difficult breathing and finally dropsy.

It is caused by diseases of the coronary arteries; deficient nutrition in the elderly; prolonged anæmia; the excessive use of alcoholic spirits; gout; phosphorus poisoning; scrofula; tuberculosis or cancer.

SYMPTOMS: The disease may exist in an advanced form without producing any observable symptoms, however, there is usually a small, weak, irregular pulse, which in some cases, sinks to 30 or 40 beats per minute. The respiration is slow and sometimes irregular (Cheyne-Stokes breathing), appearing as if the patient had forgotten to breathe; faintness upon the slightest exertion, and sometimes actual fainting occurs. Distress and difficult breathing, on taking active exercise, are felt long before any suspicion of heart-trouble is entertained. The veins of the neck are habitually distended while the face assumes a bluish tinge; indigestion and constipation of the bowels are common and there is scanty, albuminous urine. Finally the feet and legs become dropsical, the liver enlarges, abdominal dropsy comes on and the patient shortly expires.

TREATMENT: As it is impossible to restore the degenerated muscular tissue, the disease is incurable.

Where the heart's action is feeble and rapid and the patient anæmic the following should be given:

Fl. Ext. of Digitalis,.....	48 drops,
Fl. Ext. of Cactus Grand.,.....	2 drachms,
Fl. Ext. of Hydrastis Can.,.....	1 ounce,
Fl. Ext. of Gentian,.....	3 ounces,
Fl. Ext. of Nux Vomica,.....	2½ drachms,
Aromatic Elixir, sufficient to make,...	6 ounces.

Mix and give a teaspoonful four times a day; early of a morning, the middle of the morning, the middle of the evening and at night. If the pulse is slow the Digitalis

should be omitted from the foregoing formula, as it is contra-indicated in such cases.

The Nitrate of Strychnine and also the Sulphate of Sparteine are valuable heart-stimulants and may be used in these cases. The dose of the first named is from 1-40 to 1-30 of a grain, and of the latter, $\frac{1}{6}$ of a grain, every three or four hours. The Strychnine and Nux Vomica should not be given at the same time.

Should fainting occur, put the patient to bed, lower his head and give 30 drops of the Aromatic Spirits of Ammonia every hour or so as is required. The Strychnine and Sparteine previously recommended may also be used in these cases.

If the bowels are constipated, administer from 10 to 30 drops of the Fl. Ext. of Cascara Sagrada three times a day as is required to regulate them.

If the urine is scanty, give 20 grains of the Acetate of Potash, or 30 drops of the Fl. Ext. of Buchu, four or five times a day as is required.

When the symptoms of dropsy make their appearance, give 3 or 4 drops of the Fl. Ext. of Apocynum Canabinum four times a day. Should this fail to afford relief, the treatment recommended for dropsy should be given.

The patient must be impressed with the importance of avoiding mental worry and all active physical exertion, however, moderate exercise cautiously taken in the open air is beneficial.

The diet should consist of an abundant supply of animal food and other articles of the most nutritious character.

PALPITATION OF THE HEART.

IRRITABLE HEART.

Palpitation is a functional disturbance of the heart, occurring without any structural disease of this organ; characterized by paroxysms of rapid, irregular, tumultuous beating of the heart accompanied by a sensation of choking and fullness in the throat.

The usual causes of it are indigestion, mental excitement or worry, over-exertion, diseases of the nervous system, the immoderate use of alcoholic spirits, tobacco, tea, and coffee, inordinate venery.

SYMPTOMS: The paroxysms of palpitation usually commence suddenly with rapid, irregular and tumultuous beating of the heart accompanied by anxiety, a fear of impending danger, a sense of choking and fullness in the throat and inability to assume the recumbent position. The pulse is either full and strong or feeble and irregular; the face flushed or pale. These attacks come on suddenly at any time. Sometimes the shutting of a door, or any loud noise, is sufficient to produce them; and they may continue only a few minutes or several hours, the patients often voiding a large quantity of pale urine after the paroxysms have subsided, when, there is a tendency to sleep.

TREATMENT: If possible ascertain and remove the cause.

Where the pulse is too full and too strong give 2 or 3 drops of the Tr. of Veratrum four or five times a day.

If the pulse is weak, give the following:

Fl. Ext. of Digitalis,.....48 drops,
Fl. Ext. of Cactus Grandiflorus,...2 drachms,
Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful four times a day.

If the patient is anæmic, the pulse weak and the digestion impaired, give the following:

Fl. Ext. of Digitalis,.....48 drops,
Fl. Ext. of Cactus Grandiflorus,...2 drachms,
Fl. Ext. of Nux Vomica,.....3 drachms,
Fl. Ext. of Hydrastis Canadensis,...1 ounce,
Fl. Ext. of Gentian,.....3 ounces,
Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful before each regular meal.

If the bowels are constipated give 10 to 30 drops of the Fl. Ext. of Cascara Sagrada three times a day.

ANGINA PECTORIS.

NEURALGIA OF THE HEART.

Angina pectoris is a disease; characterized by paroxysms of agonizing pain in the region of the heart, extending to the left shoulder, arm, and neck and attended by a sense of impending death.

The causes of it are diseases of the aorta, coronary arteries and valves of the heart; the inordinate use of tobacco; syphilis, and often associated with hysteria. The disease is often hereditary and occurs most frequently

in men after the fortieth year. Trousseau says, that it is a form of masked epilepsy and may alternate with true epileptic attacks.

SYMPTOMS: An attack usually begins suddenly after over-exertion, excitement, or anger with a paroxysm of anxiety, oppression and agonizing pain in the region of the heart, extending to the left shoulder, arm and neck. Coldness and numbness of the fingers, or over the region of the heart, may be present. One characteristic symptom of the disease is the awful fear of impending death, which is no less agonizing than the pain. The face is frequently pale and may assume a leaden hue and is usually bathed in cold perspiration. The respirations are shallow or sometimes temporarily arrested and the patient's anxiety is extreme. The pulse may be regular and even fuller than natural. The duration of a paroxysm is from a few seconds to several minutes or hours. After the paroxysm subsides there may be eructations of gas, vomiting, or the discharge of a large amount of pale urine. Careful examination of the heart, after the paroxysm is at an end may fail to reveal any pathological symptoms; though, there is weakness, it soon disappears. The attacks recur at intervals varying from a few days to many years. Patients afflicted with the disease may die during the first or any subsequent paroxysm or may die suddenly during the interval between them.

TREATMENT: The inhalation of the Nitrite of Amyl in doses of from 3 to 5 drops from a handkerchief or napkin usually relieves the paroxysm very promptly. Should

this fail to control the pain, administer a hypodermic injection of $\frac{1}{3}$ of a grain of the Sulphate of Morphine. Chloroform also acts promptly in these cases. A half-drachm of it may be poured upon a sponge or some cotton at the bottom of a wide-mouthed bottle and inhaled at pleasure. Nitro-Glycerine given hypodermically in doses of from 1-150 to 1-100 of a grain every three to five hours, is also efficient. Where it produces headache make the dose slightly smaller.

In order to prevent a recurrence of the paroxysms 1-200 of a grain of the Nitro-Glycerine should be given three or four times a day for a long time. The Sulphate of Sparteine in doses of $\frac{1}{6}$ of a grain may also be used in the same manner for the same purpose. The Nitro-Glycerine and also the Sparteine may be obtained in tablet-form, each tablet containing the required dose.

The Iodide of Potash may be given in doses of 20 grains after each regular meal for several years, omitting it for ten days each month. It has produced good results in these cases when used in this manner. English Hawthorn (*Crategus Oxycantha*) in the form of the Fl. Ext. is highly recommended in these cases.

Persons who are subject to attacks of angina pectoris should carry Perles of Nitrite of Amyl with them and upon the first symptom of a paroxysm use them.

The patient should lead a quiet life, avoiding all excitement and sudden physical exertion.

ANEURISM.

Aneurism is a circumscribed dilatation of an artery resulting from a diseased condition of its wall, weakening its resistance to the blood pressure. Usually one or more coats of the artery are ruptured, from some cause, before the dilatation of the remaining coat or coats take place. The thoracic portion of the aorta is involved in about 75 per cent. of the cases; and the abdominal aorta and its branches in 25 per cent. Where the blood passes between the coats of the artery, forming a tumor, it is known as dissecting aneurism; other forms, are known as circumscribed aneurism. Men are more subject to it than women; and it occurs most frequently between the thirtieth and fiftieth years.

Its most common causes are arterio-sclerosis, syphilis, sudden great strain and wounds.

SYMPTOMS: When occurring at the arch of the aorta the onset is usually gradual with evidences of a thickening and hardening of the walls of the arteries and an impairment of the general health. There is more or less pain, difficult breathing, and sometimes difficulty in swallowing. There is a slight cough; more or less alteration in the voice; dilated, contracted or irregular pupils; a gradual loss of flesh and the patient has a care-worn expression. Sooner or later a pulsating tumor may be detected.

When the thoracic aorta is the seat of the tumor a deep-seated pain, either constant or paroxysmal is present. A diagnosis, when the lesion is in the thorax, is rarely ever made during life.

When occurring in the abdominal aorta there is constant pain in the abdomen, usually circumscribed, with the presence of a pulsating tumor and gradual loss of health. Where the tumor interferes with the venous circulation dropsy ensues.

TREATMENT: Absolute rest of the patient's mind and body, in bed day and night for at least three months and a dry and very much restricted diet, consisting of bread, butter, meat and a very small amount of milk. At the same time administer 20 grains of the Iodide of Potash three times a day. This treatment when persistently followed, is believed to promote clotting in the aneurismal sack thereby effecting a cure.

Galvano-puncture will sometimes produce the same result. It is performed by inserting two needles into the sack, connecting them with the poles of a galvanic battery and passing a weak current of electricity through the tumor.

The Moore-Corradi method consists of the introduction, through a hollow needle of several feet of fine silver wire, coiling it within the sack and passing a strong current of galvanic electricity through it for one or two hours, but this method is not without serious danger.

Keep the entire system in as near a normal condition as possible, meeting the various symptoms, as they arise, with appropriate treatment.

Avoid all excesses of every description, and if the patient uses alcoholic liquors, tea, coffee, or tobacco, it must be very sparingly.

PHLEBITIS.

INFLAMMATION OF A VEIN.

Phlebitis is an inflammation of a vein; characterized by a chill, fever, pain along the course of the vein and more or less swelling.

Its most common causes are wounds, local inflammation, disease of the bones, skin affections, especially those that give rise to the formation of pus; and it is not infrequently a result of puerperal fever. Both sexes are subject to it.

SYMPTOMS: An attack usually commences with a well-marked chill or rigor, followed by fever, usually of a remittent type and severe pain along the course of the vein, which, when superficial, becomes hard and knotted, resembling a cord under the skin. The skin over the vein involved is red and swollen. The tongue is coated with a whitish fur; the appetite impaired; the bowels constipated and the urine scanty and high-colored. Where appropriate treatment is commenced early in the attack resolution is usually established within a few days and recovery follows, especially in favorable cases. Otherwise, pus is formed resulting in an abscess and, in many cases, septicæmia with a low typhoid-like type of fever.

TREATMENT: Control the fever in this as in any other disease with sedatives administered according to indications, and where the fever is high, the pulse full and strong and the skin dry give from 3 to 5 grains of Acetanilide every three or four hours.

A sufficient amount of Salts should be given at the beginning of the attack to act freely on the bowels and afterwards given daily in smaller doses as is needed to keep the bowels moderately open.

If the urine is scanty give 20 grains of the Acetate of Potash every four hours until the desired effect is obtained, when, it should be administered, as it is required to keep the kidneys acting.

Where the tongue is broad, pallid, and uniformly coated with a filthy whitish material, give 20 grains of the Sulphite of Soda every four or five hours until it becomes clean or changes its color. Instead of being broad and pallid, the tongue is frequently red and dry. In this condition 3 drops of Hydrochloric Acid, well diluted with water, should be given every three or four hours. Where the Acid is given Buchu should be used instead of the Potash previously mentioned.

Where the tongue is dark-red, or purplish in addition to the Hydrochloric Acid, the following should be given:

Fl. Ext. of Baptisia,.....	36 drops,
Fl. Ext. of Echinacea,.....	6 drachms,
Water,.....	12 teaspoonfuls.

Mix and give a teaspoonful every three or four hours.

As a local application poultices, as hot as can be borne by the patient should be applied and changed frequently.

Should an abscess develop, it should be emptied as soon as pus is formed, and the cavity thoroughly cleansed with Peroxide of Hydrogen and then dressed with dry

Iodoform. These dressings should be repeated sufficiently often to insure cleanliness. See Septicæmia.

VARICOSE VEINS.

ENLARGED VEINS.

This is an enlargement or dilatation of the veins, usually of the lower extremities, as the veins of these parts are forced to sustain a column of blood, which exerts considerable dilating force, especially during violent exercise, as in wrestling or carrying heavy loads. This force is sometimes so great that the vein-walls are ruptured and hemorrhage occurs into the surrounding tissue. Where the enlargement or dilatation has progressed to any considerable extent the superficial veins may be clearly seen through the skin, appearing twisted, knotted and filled with blood. The legs frequently become swollen or puffy on account of the obstruction of the veins. When the patient is on his feet during the day the swelling is increased; and after rest in a horizontal position the swelling subsides to a great extent. The condition is not infrequently a result of pregnancy.

TREATMENT: It is claimed that the Fl. Ext. of Hamamelis Virginica (Witch Hazel) administered three times a day in from 5 to 10-drop doses, improves the condition of the veins and relieves their fullness, but we think this very doubtful, however, it may be given a trial.

Rest and mechanical pressure in the form of a flannel bandage or what is better an elastic stocking, are the most efficient means in the treatment of varicose veins. The bandage when used, should be about four inches wide

and must be applied evenly from the toes up the limb using a little more pressure on the foot and ankle than on the other parts. The stocking most commonly required is a number four or five, but those who have large limbs require a number six or seven.

The health of feeble patients must be improved by a generous diet and the administration of the following:

Fl. Ext. of Nux Vomica,.....3 drachms,

Fl. Ext. of Hydrastis Can.,.....1 ounce,

Fl. Ext. of Gentian,.....3 ounces,

Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful before each regular meal.

Operative measures are recommended, but they are not altogether free from danger, besides they frequently fail to afford relief.

Where the disease is a result of pregnancy the bowels must be kept open and the patient required to remain in the recumbent position the greater part of her time.

SEPTICÆMIA.

BLOOD-POISONING.

Septicæmia, or blood-poisoning, as its name indicates, is a disease in which there is a septic material in the fluids of the body; characterized by chills or rigors, a typhoid-like type of fever, quick, feeble pulse, prostration, delirium, and in what is known as pyæmia the formation of abscesses. In the last-named form of the disease abscesses may form in various parts of the body, both internally and externally; internally, especially in the lungs, and externally in any of the soft tissues.

The cause of it is the absorption of pus cocci or their ptomaines, which cannot occur unless there is a wound or an abrasion of the skin or mucous membranes. It is most liable to occur in wounds not treated antiseptically, or in those from their nature or location that cannot be thoroughly disinfected and protected, and following confinement or abortion. It may also follow pneumonia, pleurisy, erysipelas, typhoid fever, carbuncle, tuberculosis, appendicitis, phlebetis, etc.

SYMPTOMS: In septicæmia or pyæmia the period of invasion of the cocci or their ptomaines is generally very short, usually not more than twenty-four hours. During this time the patient is usually languid; and when from an injury or an operation, complains of more or less pain in the part. Sooner or later a chill or rigor occurs, lasting from a few minutes to one or two hours, when reaction occurs; the temperature reaching 102° to 106° Fahr.; and is followed by profuse perspiration. The chills or rigors may occur several times a day, or but once a day; or there may be none after the first one. The pulse is usually small and frequent, becoming thready; the tongue is red, soon becoming brown and dry; the teeth and lips are covered with sordes; the stomach is irritable, and nausea with vomiting occurs from slight causes; diarrhœa sometimes occurs, the discharges being dark and very offensive; the urine is high-colored, scanty and foetid; the extremities cool; the trunk hot; there is delirium; there are involuntary discharges of the fœces and urine; a tenderness of the entire body, and some-

times severe pains in the internal organs and joints. These symptoms increase day by day, bearing a close resemblance to a severe case of typhoid fever. In many cases there is an inflammation of the lungs or some other internal organ, the joints or soft parts. These inflammations run a rapid course and always terminate in suppuration, sometimes several parts are affected at the same time or many small abscesses form in various parts of the body. The inflammation and abscesses occur more especially with the form of the disease known as pyæmia, which means, literally, pus in the blood.

TREATMENT: Septicæmia or blood-poisoning, resulting from a wound, can usually be prevented by thoroughly washing all wounds with a 1 to 2000 solution of Bichloride of Mercury, then, dusting the wound with Iodoform, after which bringing the parts together and covering the wound with Bichloride-Gauze and this with absorbent cotton, and, then, carefully applying a roller bandage. Should pus appear in the wound it must be removed with Peroxide of Hydrogen, which effervesces with pus, and, then, the wound dressed as previously directed.

When abscesses form they should be thoroughly emptied and their cavities cleansed with Peroxide of Hydrogen and then dressed as previously recommended for wounds.

Endeavor to keep the bowels and kidneys in a normal condition throughout the attack.

Control the fever with sedatives, administered according to indications as in any other disease. If the pulse is quick, full and strong give Aconite or Veratrum and if there is flushed face, bright eyes and contracted pupils add Gelsemium; and, in all cases of blood-poisoning add Echinacea, thus:

Tr. of Aconite Root,.....	18 drops,
Fl. Ext. of Gelsemium,.....	27 drops,
Fl. Ext. of Echinacea,.....	6 drachms,
Water,.....	12 teaspoonfuls.

Mix and give a teaspoonful every hour and a half or two hours. If the fever is high, in addition to the foregoing, give from 3 to 5 grains of Acetanilide every three or four hours.

When the pulse is weak or irregular give Digitalis and Cactus, instead of the Aconite or Veratrum, adding the Echinacea as follows:

Fl. Ext. of Digitalis,.....	18 drops,
Fl. Ext. of Cactus Grand.,.....	36 drops,
Fl. Ext. of Echinacea,.....	6 drachms,
Water,.....	12 teaspoonfuls.

Mix and give a teaspoonful every two hours. Where the patient is very weak, from the 1-60 to the 1-40 of a grain of the Sulphate of Strychnine should also be given every four hours. Whiskey and Aromatic Spirits of Ammonia are also valuable stimulants in these cases and their use should not be neglected. The former is a very valuable food, especially when given in the form of Egg-Nog or Milk-Punch.

When the fever is distinctly periodic Quinine should be given. It may be used as in remittent fever.

In cases where the formation of pus is profuse $\frac{1}{8}$ of a grain of the Sulphide of Calcium should be given every four or six hours.

When the disease follows confinement or abortion, in addition to the foregoing treatment, the womb and vagina should be thoroughly washed out with douches of a 1 to 4000 solution of Bichloride of Mercury, two or three times a day, and the following added to each dose of the Aconite, Veratrum or Digitalis-mixtures:

Fl. Ext. of Cimicifuga,..... 3 drops,

Fl. Ext. of Phytolacca Dec.,..... 1 drop.

These may be added when the preparation, just mentioned, is prepared.

Any remedy, if indicated, used in typhoid fever may also be used in septicæmia.

Profuse perspiration, when present, may be treated similarly to night-sweats.

Let the patient's diet be of the most nutritious character, but it should consist of articles that are easily digested.

DROPSY.

Dropsy is an unnatural accumulation of a watery fluid in some cavity, or the areola texture, of the body. It is really not a disease, as is popularly believed, but only a symptom and as it may be a result of various diseases, a separate notice of it is demanded.

The cardinal elements in the causation of dropsy are obstructed venous circulation, arrested excretion and absorption and an excess of water in the blood. Either one of these causes may induce it. Dropsy follows diseases of the heart or liver on account of the obstruction of the venous circulation; diseases of the kidneys, or the action of cold on the skin on account of excretion's being checked; and wasting diseases on account of the watery state of the blood.

A collection of serum, or watery fluid, in the cavity of the skull is called *HYDROCEPHALUS*; in the sack (pericardium) that envelops the heart, *HYDROPERICARDIUM*; in the chest, between the lungs and the lining membrane of the chest-wall, *HYDROTHORAX*; in the abdomen, *ASCITES*; in the scrotum, *HYDROCELE*; and in the areola texture, *ANASARCA*, or general dropsy.

HYDROCEPHALUS.

DROPSY OF THE BRAIN.

This, as previously stated, is an accumulation of a watery fluid in the cavities of the brain or between the brain and the skull; characterized by enlargement of the head and more or less disturbance of the nervous system.

It is almost exclusively a disease of infants or very young children, and especially those whose parents are scrofulous, tuberculous, or syphilitic. It is usually the result of an inflammatory condition of one of the covering membranes of the brain. The eruptive fevers, whooping-cough, diseases of the bowels, etc., may be its exciting cause.

SYMPTOMS: The symptoms at the beginning of an attack are variable, however, there are usually more or less impairment of digestion, constipation or irregularity of the bowels, feebleness of the circulation, coldness of the extremities, pallidity or puffiness of the face, and, if the child can talk, it will probably complain of its head, or, if it cannot talk, it may roll its head from side to side, frequently throwing its hands to it. As the disease advances the child becomes stupid, the pupils dilated, the eyes are involuntary rolled about, it sleeps with the eyes partly open, the pulse grows weaker day by day and the symptoms of pain, previously mentioned, are now absent. The head increases in size until, in some cases, it becomes enormously large. The sutures of the skull separate, sooner or later convulsions occur and the little sufferer finally expires. This usually occurs within the first year, however, cases of fifteen or twenty years' duration are recorded.

TREATMENT: Various plans of treatment have been tried but with little or no benefit. The remedies which we prefer in these cases are Apocynum Cannabinum and the Iodide of Potash. The dose of the first named for a child one year old and under is from a 1-12 to 1-5 of a drop. It may be prepared for administration as follows:

Fl. Ext. of Apocynum Cannabinum, . . . 2 drops,
Water, 10 drops.

Mix and give one drop of the mixture four or five times a day. The dose of the Potash for a child one year old and under is from $\frac{1}{4}$ to 1 grain three times a day.

See that the patient has a free action from the bowels each day and if there is diarrhœa it must be relieved by appropriate treatment.

Where there is scantiness of urine give Acetate of Potash every three or four hours. The dose of it and the Iodide is the same.

Should convulsions occur Chloral Hydrate may be given every half-hour until they are controlled. The dose of it is one grain for each year of age up to twenty years.

There is good authority for evacuating the fluid with an aspirator, using the finest needle, but there can be little, if any, good derived from this operation, however, it might be tried as a last resort.

When patients have fever it should be controlled with sedatives administered according to indications in this as in any other disease.

HYDROPERICARDIUM.

DROPSY OF THE HEART.

This is an accumulation of a watery fluid in the pericardium; characterized by difficult breathing and swallowing, distress in the region of the heart with more or less disturbance of its action.

It may be a part of a general dropsy, or it may result from Bright's disease of the kidneys, pressure of an aneurism, etc.

SYMPTOMS: There is usually more or less palpitation of the heart; irregular pulse, shortness of breath, which is sometimes so severe that the patient is compelled to

remain in an erect posture in order to breathe at all, and, if the pericardium is greatly distended, there is apt to be difficulty in swallowing; and if the region over the heart is percussed unnatural dullness is detected.

TREATMENT: This will depend to a great extent on its cause, which should be determined and removed if possible. Great benefit is usually derived from the following:

Fl. Ext. of Digitalis,..... $\frac{1}{2}$ drachm,
Fl. Ext. of Cactus Grand.,.....1 drachm,
Fl. Ext. of Apocynum Can.,.....1 drachm,
Water, sufficient to make,.....4 ounces.

Mix and give a teaspoonful every four hours.

Acetate of Potash or the Fl. Ext. of Hair-Cap Moss, should be given every four or five hours for the purpose of increasing the flow of urine. The dose of the first is 20 grains and of the latter 20 to 30 drops.

Where the patient's strength is good from 1-12 to 1-8 of a grain of Elaterium given every four hours until free, watery discharges are obtained from the bowels, will usually afford marked relief. Instead of the Elaterium a tablespoonful of common Salts and a teaspoonful of Cream of Tartar may be dissolved in a half a glass of water and given every four hours until copious, watery discharges are obtained from the bowels. These remedies may be repeated in this manner every day or two as the patient's strength will bear them.

Should the patient be greatly debilitated, in addition to the foregoing treatment, administer the following:

Fl. Ext. of Nux Vomica,.....3 drachms,
Fl. Ext. of Gentian,.....3 ounces,
Fl. Ext. of Hydrastis Can.,.....1 ounce,
Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful three times a day before meals.

As a last resort the fluid may be withdrawn with an aspirator.

HYDROTHORAX.

DROPSY OF THE CHEST.

This is an accumulation of a watery fluid in the pleural cavity; characterized by irregular pulse, difficulty in breathing, dullness on percussion, a dry, hacking cough, inability to lie on the affected side or if both sides are involved an inability to assume the recumbent position.

It may be produced by the various causes that produce other forms of dropsy such as diseases of the kidneys, heart, etc., or, it may be the result of a general dropsy.

SYMPTOMS: In the early stage of the disease there is oppression, difficulty in breathing, which is increased by unaccustomed exercise or by assuming the recumbent position, especially where the amount of fluid is great or when both sides are involved. If the accumulation of fluid is confined to one side the patient is unable to lie on the other side.

In an advanced stage of the disease there is a short, dry, hacking cough; frequent shivering; irregularity of the pulse; a sense of oppression and heaviness at the pit of the stomach; palpitation of the heart; disturbed sleep

and an inability to lie down, the patient being forced to maintain a sitting posture. Finally the face, lips and hands present a livid, or mottled appearance; there is swelling or puffiness of the feet and legs, great thirst, numbness of one or both arms, swelling of the lower eyelids, the urine being scanty and high-colored. There is, at this stage, marked dullness on percussion, enlargement of the side or sides; bulging of the intercostal spaces; and, finally, a clammy sweat occurs upon the face and upper part of the body, followed by drowsiness or delirium, which is caused by insufficient oxygenation of the blood and want of sleep. Death may take place suddenly, or it may be preceded for a few days by slight hemorrhages from the lungs.

TREATMENT: The same as that recommended for dropsy of the heart.

ASCITES.

DROPSY OF THE ABDOMEN.

This, as its name indicates, is a collection of a watery fluid in the peritoneal cavity; characterized by enlargement of the abdomen, difficulty in breathing, disturbed action of the heart, etc.

Its most common causes are diseases of the liver and kidneys.

SYMPTOMS: In addition to the symptoms of the disease that produces it, the first thing that attracts attention is the swelling of the abdomen. In the sitting posture, the fullness is greatest in the lower part of the bowels, but when the patient lies down the fluid gravitates to

the most dependent part and its position is immediately changed by a change of the patient's position.

As the amount of fluid increases in the peritoneal cavity, the abdomen becomes greater in circumference until it is frequently two or three times its natural size. By placing a hand on each side of the abdomen and making pressure alternately, first on one side and then on the other, the motion of the fluid can be distinctly felt.

As the amount of fluid increases the diaphragm is pushed upwards, thus making the thoracic cavity smaller and compressing the heart and lungs, rendering the heart's action irregular and the breathing difficult. The urine becomes scanty, the bowels constipated, the feet and legs swollen, and, in a majority of cases, death soon closes the scene.

TREATMENT: Detect the cause and if possible, remove it. In other respects the treatment is the same as that of dropsy of the heart.

In many cases life may be prolonged by "tapping." This is accomplished by means of a trocar and canula or an aspirator.

HYDROCELE.

DROPSY OF THE SCROTUM.

Hydrocele is an accumulation of a watery fluid in the scrotum; characterized by an increase in its size and more or less translucency of the part.

SYMPTOMS: The first symptom that attracts attention is a swollen condition of the lower part of the scrotum and it will be observed that this swelling is gradually

extending upwards; the tumor finally becoming pear-shaped, when it feels similar to a bladder distended with water. The scrotum is sometimes enormously enlarged, however, the condition is not dangerous to life. It may be distinguished from hernia by the slowness of its formation; by recent cases showing a translucency when the scrotum is held between the observer and a lighted lamp, and by its size not being increased by coughing.

TREATMENT: Remove the fluid with a trocar and canula or an aspirator and before the canula or needle is withdrawn inject Tr. of Iodine into the scrotum, in order to produce an adhesive inflammation. After injecting the Iodine the opening in the canula should be closed until the scrotum is thoroughly manipulated for the purpose of bringing the remedy into contact with all the recesses of the sack; when, the Iodine must be allowed to escape and the canula be withdrawn. Usually this treatment is all that is required to make a permanent cure.

In children a cure may be frequently affected by a thorough course of *Apocynum Cannabinum* and *Acetate of Potash*.

ANASARCA.

GENERAL DROPSY.

Anasarca, or general dropsy is an accumulation of a watery fluid in the areola texture of the body; characterized by swelling or puffiness, usually commencing in the lower extremities, and pitting under pressure.

General dropsy may be produced by a variety of causes, such as diseases of the heart, liver, kidneys, and spleen.

It may also follow attacks of fever, inflammation, severe hemorrhages, obstructed menstruation, the excessive use of alcoholic liquors, etc.

SYMPTOMS: The first symptom of a general dropsy is, usually, a swelling of the feet and ankles, which is worse of an evening, especially in those who have remained on the feet the greater part of the day. When the recumbent position has been assumed for several hours, the swelling subsides, in some cases, entirely for the time. The swelling is soft, inelastic and pits upon pressure being applied; and the skin is paler than is natural and has a glistening appearance. As the quantity of fluid increases the swelling becomes greater and extends upwards, finally reaching the body; and when the amount of fluid is great the face and eyelids are swollen, especially on arising in the morning. In some cases, the fluid oozes out through the skin, while in others, there are elevations on the skin resembling blisters.

The pulse becomes small and weak; the bowels constipated; the urine scanty and high-colored, usually depositing a sediment on standing; the appetite impaired; thirst increased and the skin pale and inelastic. As the disease advances the patient becomes greatly debilitated; and the skin assumes a livid hue and there is frequently more or less fever. When the accumulation of fluid becomes general, there is a cough with the expectoration of a watery material and difficulty in breathing. Where relief is not obtained these symptoms grow worse day by day until death closes the scene.

TREATMENT: Discover the cause and remove it, if possible, and, then, adopt the treatment recommended for dropsy of the heart. Where the spleen is enlarged appropriate treatment must be given for its relief. Control fever, when present, by the administration of sedatives according to indications.

GOITRE.

BIG NECK.

Goitre, or bronchocele, as it is sometimes called, is an enlargement of the thyroid gland; characterized by a gradual enlargement of the gland followed by more or less pain and discoloration of the cuticle covering it.

The uses of the gland are unknown. It covers the front and lower part of the larynx as well as the first rings of the wind-pipe.

The disease is more common in Europe, especially in the deep valleys of the Alps than in America, however, cases of it are occasionally seen on all parts of the globe. Females are more subject to it than males; and it is not infrequently associated with diseases of the reproductive organs.

SYMPTOMS: These are a gradual enlargement of the gland, which is at first soft and without pain or discoloration of the skin, but as the gland increases in size it becomes more or less hard and painful and the skin covering it becomes discolored. The enlargement is sometimes so great that it interferes with breathing.

Goitre is sometimes associated with what is known as cretinism, a condition of mental and bodily weakness.

TREATMENT: The following will sometimes relieve recent cases.

Iodide of Potash,.....1 ounce,

Compound Syr. Stillingia, to make,..6 ounces.

Mix and give a teaspoonful after each regular meal. At the same time paint the tumor every few days with Tr. of Iodine.

Operative procedures are recommended by some, while others recommend electrical treatment, but the great majority of cases, of long standing, are incurable by any method of treatment, however, life is not usually endangered or shortened by the disease.

PART V.

DISEASES OF THE DIGESTIVE APPARATUS.

In this part of the work diseases of the mouth, œsophagus, stomach, intestines, liver and pancreas will be considered.

STOMATITIS.

INFLAMMATION OF THE MOUTH.

Stomatitis is an inflammation of a whole or a part of the mucous membrane of the mouth; characterized by heat, pain, redness, and more or less swelling.

Its most common causes are the introduction of hot or irritating substances into the mouth, difficult dentition, and it is not an infrequent complication of the eruptive or other fevers. The chronic variety of the disease usually results from the excessive use of alcoholic liquors or tobacco, therefore, it is rarely seen in children.

SYMPTOMS: Stomatitis begins with more or less heat and pain followed by redness and slight swelling of the mucous membrane of the mouth and tongue. In some cases, there is dryness of the mouth, while in others, there is a copious flow of saliva. The child is uneasy, fretful and cross and suffers considerable pain while eating or nursing.

There may be a derangement of the bowels, and if the child is suffering from difficult dentition slight fever is not uncommon.

TREATMENT: The treatment required in these cases is usually very simple. If there is fever control it with sedatives administered according to indications; and, if there is irritation of the stomach, or diarrhœa, appropriate remedies for the condition must be used.

The following is efficient:

Chlorate of Potash,	1 drachm,
Carbolic Acid,	10 drops,
Water,	4 ounces.

Mix and wash the mouth thoroughly by means of a soft, cotton mop, every two or three hours, or:

Borax,	1 drachm,
Honey,	1 ounce,
Infusion of Sage,	3 ounces.

Mix and use as the preceding.

In severe cases, Silver may be used as follows:

Nitrate of Silver,	3 grains,
Water,	1 ounce.

Mix and use every three or four hours with a soft mop.

Hydrastis Canadensis also makes a valuable wash in these cases. One ounce of the Fl. Ext. of it may be added to 3 ounces of water and used as a wash.

FOLLICULAR STOMATITIS

APHTHA, OR THRUSH.

This is an inflammation of the mucous membranes of the mouth, associated with, or resulting from the

growth of a parasitic plant, the *oidium albicans*; characterized by more or less disturbance of the stomach and bowels, slight fever and the formation of small white patches, or spots, on an inflamed base.

The most common causes of it are improper or unwholesome food, impure air and uncleanness.

SYMPTOMS: The first symptom that attracts our attention is the sore mouth; and upon examination small, white points or patches will be found upon the mucous membrane, their base being red and swollen. The mouth is sometimes so tender that it is with difficulty that the child can eat or nurse. In some instances, especially in severe cases, the greater part of the mouth is involved, and there is usually more or less fever, irritation of the stomach and irregularity of the bowels.

TREATMENT: When fever is present control it with sedatives administered according to indications. If the bowels are constipated, which is rarely the case administer Oil or Salts; and if the child is being raised by hand keep its nursing bottle scrupulously clean.

If the stomach is irritable remedies for its relief must be used; and if diarrhea is present it must receive appropriate treatment.

The following answers a good purpose in these cases:

Chlorate of Potash,.....	1 drachm,
Carbolic Acid,.....	10 drops,
Water,.....	4 ounces.

Mix and apply to the mouth with a cotton mop every two or three hours, or:

Sulphite of Soda,.....4 drachms,

Water,.....4 ounces.

Mix and use as the preceding prescription is directed, or:

Boracic Acid,.....1 drachm,

Water,.....4 ounces.

Mix and use as the preceding.

In severe cases it may be necessary to touch the patches with Nitrate of Silver and afterwards use a solution of it of the strength of 5 grains to the ounce of water.

If the patient is debilitated the following tonic should be given:

Fl. Ext. of Nux Vomica,.....1 drachm,

Fl. Ext. of Hydrastis Can.,.....2½ drachms,

Fowler's solution of Arsenic,.....½ drachm,

Aromatic Elixir, sufficient to make,. 2 ounces.

Mix and to a child one year old give 5 drops three times a day before meals.

ULCERATIVE STOMATITIS.

ULCERATIVE INFLAMMATION OF THE MOUTH.

Ulcerative stomatitis is an acute inflammation of the mucous membrane of the mouth, continuing until there is an extensive, unhealthy, ulceration; characterized by heat and pain in the mouth; enlargement and tenderness of the submaxillary glands with an increased flow of saliva mixed with blood, shreds, etc. It is a disease of childhood, but adults are not exempt from it.

The causes of it are thought to be personal uncleanness, poor food and unhealthful surroundings, however,

it is occasionally seen in those who are in good circumstances.

SYMPTOMS: The disease usually commences in the gums, which become red, swollen, and bleeding, and are soon covered with a grayish, membranous formation. The inflammation and ulceration extend to the corresponding portion of the membrane lining the mouth and lips, commencing with small, whitish spots, which enlarge and run together until they form large, grey patches, covering the erosion or ulceration. Usually the ulceration is circumscribed, but occasionally it extends to all parts of the mouth. If not checked the inflammation continues and the ulceration deepens, the greyish layers of false membrane are detached, when, they are quickly renewed, thus perpetuating the disease.

In severe cases the submaxillary glands are swollen, hard and painful, and the breath is offensive. The suffering is severe; the child restless, uneasy and unable to eat or nurse. More or less fever, with a quick, weak pulse, loss of appetite and emaciation is usually present. Sometimes the ulceration is so extensive that the teeth are loosened and in rare instances fall out.

TREATMENT: If the treatment is commenced early Chlorate of Potash in from 1 to 5-grain doses every four hours and at the same time using a wash of a saturated solution of the same will usually be all that is required in these cases.

The following also makes a valuable local application in these cases:

Tannin,.....4 drachms,
 Water,.....4 ounces.

Mix and apply thoroughly with a soft mop every two or three hours.

Where the ulceration shows a tendency to spread the following should be used:

Nitrate of Silver,.....10 grains,
 Water,.....1 ounce.

Mix and apply two or three times a day by means of a soft mop. Should these means fail to check the disease the ulcers must be penciled once a day with pure Nitrate of Silver.

When fever is present, it should be controlled with sedatives administered according to indications.

Diarrhœa when present, should be relieved with appropriate remedies and if the stomach is irritated it must be relieved.

If the patient is debilitated after the fever subsides administer the following tonic:

Fl. Ext. of Nux Vomica,.....1 drachm,
 Fl. Ext. of Hydrastis Can.,.....2½ drachms,
 Fl. Ext. of Gentian,.....1 ounce,
 Aromatic Elixir, sufficient to make...2 ounces.

Mix and, for a child three years old, give 10 or 12 drops before each regular meal.

GANGRENOUS STOMATITIS.

GANGRENOUS INFLAMMATION OF THE MOUTH.

This disease, also known as cancrum oris or noma, is an acute, rapidly progressive gangrenous ulceration of

the cheek and gums. It is a disease of childhood, cases of it rarely occurring in the adult. All the preceding forms of inflammation of the mouth may terminate in gangrene, but none of them are so rapid or destructive in their effects as the form now under consideration.

Feeble, sickly children, are more subject to the disease than others and it attacks girls more frequently than boys. Impure air, unwholesome food, and the excessive use of mercury are among its principal causes. It is not infrequently secondary to measles, and an attack may follow scarlet fever, typhoid and typhus fevers, and pneumonia. It is believed by some to be due to a parasitic micro-organism, the character of which is unknown.

SYMPTOMS: "The symptoms vary; in some cases small vesicles of an ashy, dark-red, or even black color, are observed within the mouth, on the lips or cheek, encircled by a red base, with little pain or swelling, more or less salivation and a peculiar fœtor. These vesicles pass rapidly into a gangrenous condition, with an augmentation of the pain, heat and tumefaction. Dark or purplish spots appear in the region of the vesicles, which soon form large sloughs; and they progress so rapidly that in the space of forty-eight hours, all the fleshy parts of the mouth and face may be destroyed by the gangrenous action. In other instances, the ulceration commences on the gums, which at first present a white and spongy appearance, but which rapidly passes into ulceration and gangrene, also spreading and involving the jaws, cheeks and lips. The breath becomes intolerably offen-

sive, the teeth fall out, the soft tissues swell, become hard and purple, ulceration with sloughing ensues, and the discharge from the diseased parts are usually so acrid as to excoriate the parts over which it is permitted to flow."

"At first the general health does not appear to be much affected, but as the disease progresses and the soft tissues are destroyed, an irritative fever ensues, with loss of appetite, emaciation, diarrhœa, and death."—King.

TREATMENT: This to be of any benefit must be heroic. As soon as the nature of the attack is determined the sloughing surface and the tissue immediately surrounding it must be destroyed with strong Nitric Acid, however, before undertaking this procedure Chloroform should be administered by inhalation until the patient is thoroughly anæsthetized. After the operation the mouth should be cleansed with the following:

Peroxide of Hydrogen,.....1 ounce,

Water,.....2 ounces.

Mix and apply every two or three hours.

The following also makes a valuable wash in these cases:

Permanganate of Potash,.....10 grains,

Water,.....2 ounces.

Mix and use with a soft mop every two or three hours.

Keep the bowels moderately open from the beginning of the attack; and if there is fever administer sedatives according to indications, adding the Fl. Ext. of Echinacea. Should diarrhœa occur control it with appropriate remedies.

When the patient becomes weak, stimulants, such as Whiskey, Brandy, or Aromatic Spirits of Ammonia, should be administered.

The diet must be of the most nutritious character; and after convalescence is established the following tonic should be given:

Fl. Ext. of Nux Vomica,.....1 drachm,

Fl. Ext. of Hydrastis Can.,....2½ drachms,

Fl. Ext. of Gentian,.....1 ounce,

Aromatic Elixir, sufficient to make, 2 ounces.

Mix, and for a child three years old give 10 or 12 drops before each regular meal.

GLOSSITIS.

INFLAMMATION OF THE TONGUE.

Glossitis is an inflammation of the substance (parenchyma) of the tongue; characterized by more or less fever, heat, pain and swelling, with an increased flow of saliva, difficulty in mastication, deglutition and speech. There are two varieties; the acute and the chronic.

Acute glossitis usually results from mercurial poisoning, or direct injury to the tongue, such as the taking of hot liquids, acrid or corrosive substances into the mouth. It may also result from the sting of insects, such as the wasp or bee.

Chronic glossitis usually occurs in patches along the edges of the tongue. It may follow the acute variety, or it may result from diseased teeth, smoking, especially the pipe, and it may occur in the aged without any apparent cause.

SYMPTOMS: Acute inflammation of the tongue usually begins abruptly with fever, restlessness, anxiety and swelling of this organ, accompanied by heat, pain and an increased flow of saliva. The glands at the angles of the jaw become swollen and tender, and the tongue so greatly swollen that it sometimes protrudes from the mouth.

Movements of the tongue in talking, chewing or swallowing, produce intense pain, and there is, in some cases, difficult breathing and an inability to lie down, on account of an obstruction to the free entrance of air into the lungs. The veins of the neck are sometimes compressed; in these cases there is blueness of the face and the patient may die from suffocation. When the inflammation terminates in suppuration, the constitutional symptoms usually become more severe.

In chronic inflammation of the tongue the chief symptom is pain or aching, which is not infrequently aggravated by movements of this organ.

TREATMENT: Acute inflammation of the tongue demands prompt treatment. The fever should be controlled with the proper sedatives and the bowels kept moderately open with Oil, Salts or Seidlitz Powders.

Ice should be kept constantly applied to the tongue and also at the angles of the jaw. If the ice is not at hand, hot water which has had 1 drachm of the Fl. Ext. of *Pinus Canadensis*, or 10 to 20 grains of Tannin added to each ounce should be held in the mouth; and cloths wrung out of hot water should be applied to the angles of the jaw.

If the case is a severe one, and the swelling great, the tongue should be scarified. If an abscess forms, it should be promptly opened; and if suffocation is imminent, tracheotomy (an operation in which there is an opening made in the wind-pipe for the purpose of allowing air to enter and leave the lungs) should be performed at once.

In chronic inflammation of the tongue, if possible, remove the cause and avoid all irritants, such as tobacco and alcoholic liquors; and use the following:

Nitrate of Silver,.....10 grains,

Water,1 ounce.

Mix and apply twice a day by means of a soft mop; or the parts may be cauterized every two or three days with stick-Nitrate of Silver.

TONSILLITIS.

QUINSY.

Tonsillitis, or quinsy, is an inflammation of the tonsils; characterized by fever, pain in the throat, difficulty in breathing and swallowing, and a guttural cough with a constant desire to clear the throat.

When small ash-colored spots appear on the tonsils the disease is known as follicular tonsillitis. Many physicians call this form of the disease diphtheria, thus unnecessarily alarming parents and friends.

The causes of it are changeable weather, exposure to cold or damp. Strumous persons are more subject to it than others. One attack predisposes to another. Rheumatism is preceded by tonsillitis in probably 30 per cent of attacks of that disease. The presence of strep-

tococci and staphylococci has been detected, especially in the follicular form of the disease, and where there was the formation of pus in the tonsils.

SYMPTOMS: An attack usually commences with a chill, which is soon followed by fever, quickened pulse, soreness and stiffness of the throat, headache, thirst, pain and swelling at the angles of the jaw, a guttural cough and a constant desire to clear the throat. There is usually pain and difficulty in breathing and swallowing and some patients complain of ear-ache and more or less deafness. If the throat is examined the tonsils will be found red and swollen, sometimes to such an extent that the opening of the fauces is almost entirely closed.

An attack usually lasts from a few days to a week, and either terminates by resolution or suppuration. When the disease terminates in suppuration the gland enlarges rapidly, the pain becomes dull and throbbing. The pus usually comes to the surface and is discharged without surgical aid, but a cure is materially hastened by incising the gland, thus giving free exit to the pus.

An acute attack is not infrequently followed by the chronic form of the disease, especially in those who are predisposed to tonsillitis. In these cases the glands, on examination, appear prominent, enlarged, and of a dusky, red-color; and there is more or less cough caused by the irritation and sometimes an elongation of the uvula.

TREATMENT: The treatment of this, as all other diseases in which there is fever, should be commenced by the administration of sedatives according to indica-

tions. If there is a full, quick pulse, give Veratrum or Aconite, and if the face is flushed, the eyes bright and the pupils contracted, add Gelsemium. Phytolacca (Poke Root) is also a valuable remedy in tonsillitis and should be added to the sedative, as follows:

Tr. of Veratrum Viride,.....18 drops,
 Fl. Ext. of Gelsemium,.....27 drops,
 Fl. Ext. of Phytolacca Decandra,.18 drops,
 Water,.....18 teaspoonfuls.

Mix, and give a teaspoonful every hour and a half while there is fever, allowing the patient no water for a few minutes after taking a dose, thus obtaining the local effect of the remedies on the tonsils.

In all cases where the stomach is irritated, Aconite should be used instead of the Veratrum and if the patient is stupid, the pupils being too large, add Belladonna instead of the Gelsemium, as follows:

Tr. of Aconite Root,.....18 drops,
 Fl. Ext. of Belladonna,.....6 drops,
 Fl. Ext. of Phytolacca Decandra,.18 drops,
 Water,.....18 teaspoonfuls.

Mix, and give a teaspoonful every hour and a half while there is fever, allowing no water for a few minutes after taking a dose.

At the beginning of the attack, it would probably be well to administer the following:

Calomel,.....1 grain,
 Bicarbonate of Soda,10 grains,
 Powd. Ipecac,1 grain.

Mix and divide into five powders and give one of them every hour. Should they fail to act mildly on the bowels, give Oil, Salts or a Seidlitz Powder.

Keep the bowels slightly open throughout the attack; either of the three last-named remedies may be used for this purpose.

If there is scantiness of urine, give 20 grains of the Acetate of Potash, or 30 drops of the Fl. Ext. of Buchu, every three or four hours.

The patient should inhale the steam from equal parts of vinegar and water a few minutes every two or three hours.

Penciling the tonsils with Tr. of Veratrum Viride, every three or four hours, is very efficient as a local application.

The following makes an efficient gargle:

Tr. of Chloride of Iron,	1 drachm,
Chlorate of Potash,	1 drachm,
Glycerine,	1 ounce,
Water, sufficient to make	4 ounces.

Mix and use as a gargle every three hours. In preparing this prescription dissolve the Potash in water, then add the Iron and Glycerine.

The following is very efficient in these cases:

Ammoniated Tr. of Guaiac,	1 ounce,
Glycerine,	$\frac{1}{2}$ ounce,
Simple Syrup, sufficient to make	2 ounces.

Mix and give a teaspoonful without water every three hours, instructing the patient to swallow it slowly.

Should pus form, as soon as fluctuation can be detected, the tonsil should be lanced; however, the operator should be very careful not to incise an important blood-vessel.

In follicular tonsillitis, in addition to the treatment already recommended, $\frac{1}{8}$ of a grain of the Sulphide of Calcium should be given every four hours.

The patient's diet should consist of milk, soups, beef-essence, eggs, etc., adding Whiskey if there is very much weakness.

Where the inflammation becomes chronic the following will frequently effect a cure:

Iodide of Potash,.....1 ounce,
Fl. Ext. of Phytolacca Decandra,..2½ drachms,
Compound Syr. of Stillingia, to make,. 6 ounces.

Mix and give a teaspoonful three times a day after meals. The remedy should be used from three to six months, however, it would be well to discontinue its use for ten days in each month.

ŒSOPHAGITIS.

INFLAMMATION OF THE ŒSOPHAGUS.

This is an inflammation of a part or the whole of the mucous membrane lining the canal leading from the mouth to the stomach; characterized by more or less fever, pain between the shoulders, or deep-seated under the sternum, thirst and difficulty in swallowing. It is a rare disease, and may be either acute or chronic.

The usual causes of it are the passage of hot fluids or solids to the stomach; irritating drugs, corrosive poisons,

the excessive use of alcoholic liquors; or it may result from an extension of an inflammation of the parts either above or below it.

SYMPTOMS: These vary with the severity of the attack; there is, however, more or less fever, pain, sometimes of a burning character, between the shoulders, or deep-seated under the sternum, and constant thirst.

Swallowing, which is sometimes impossible, produces intense pain and is occasionally followed by vomiting. Paroxysms of coughing, with difficult breathing, are not uncommon in severe cases. When ulceration is present, food that is swallowed passes to the ulcer and is then forced back by spasmodic contraction of the œsophagus, the food acting as an irritant to the raw surface.

In the chronic variety of the disease there is pain and difficulty only when solids are swallowed. When ulcers exist there may be vomiting of a tough mucus streaked with blood, accompanied by symptoms of stricture of the œsophagus.

TREATMENT: Should the inflammation be the result of a foreign body lodged in the throat, it should be removed at once; and where corrosive drugs have been swallowed the proper antidote must be administered without delay. The fever must be controlled with sedatives administered according to indications; however, in these cases Aconite is the preferable remedy. A weak solution of Carbolic Acid should also be given; it may be prepared as follows:

Carbolic Acid,.....	20 drops,
Gum Arabic,.....	30 grains,
Water,.....	4 ounces.

Mix and give a teaspoonful every two or three hours, instructing the patient to swallow it very slowly.

For the purpose of relieving thirst small pieces of ice may be held in the mouth.

Where the pain is severe hypodermics of Morphine, sufficient to produce rest, must be given.

Keep the bowels open from the beginning of the attack; this may usually be accomplished by means of enemas.

All solid foods must be avoided, the diet consisting of milk, tea, soups, etc.

STRICTURE OF THE ŒSOPHAGUS.

Stricture of the œsophagus is a narrowing of the canal that leads from the mouth to the stomach; characterized by difficulty in swallowing, more or less pain and emaciation.

It may be the result of inflammation; the contraction of scars formed by the healing of ulcers; or tumors may develop in the canal and produce obstruction. The lodging of foreign bodies, and the contraction of muscles, caused by irritation of the œsophageal mucous membrane may also temporarily produce it.

SYMPTOMS: The symptoms vary with the special cause producing the stricture and the degree of narrowing of the œsophagus. The first and most prominent symptom is a sense of obstruction to the passage of food,

which the patient refers to a certain point, or, an apparently healthy person may experience a painful pressure in attempting to swallow a larger quantity of food at once, than usual. Finally the swallowing of fluids becomes difficult and the patient observes that the time required for food to reach the stomach is prolonged.

When stricture is due to cancer, difficulty in swallowing is usually the only symptom complained of, but when it is caused by corrosive poisons or a wound, pain is a prominent symptom from the onset.

In many cases the œsophagus is dilated above the stricture and may contain a considerable quantity of the material which the patient has recently attempted to swallow. In these cases the material together with more or less mucus is regurgitated three or four hours after meals; and, if this material is alkaline, we may be certain that it does not come from the stomach. Emaciation and debility gradually increase until they become extreme and finally, in a majority of cases, death closes the scene.

TREATMENT: The stricture should be gradually and methodically dilated with a flexible English bougie. To begin with, a No. 16 should be employed; after warming, and lubricating it with Glycerine, it may be carefully inserted into the œsophagus until it has passed the stricture. Its use should be preceded by a spray of a four per cent. solution of Cocaine to prevent spasm of the muscles surrounding the canal. Where the stricture almost closes the canal it may be necessary to commence the treatment with a catgut-sound. The instrument should

be used daily, and at intervals of three or four days larger bougies should be tried.

When the patient is unable to swallow a sufficient amount of food, a Symonds tube should be passed into the stomach and through it liquid food may be introduced.

Concentrated forms of food, such as raw eggs, beef-essence, rich soups, milk and infants' food may be administered.

When it is impossible to introduce the bougie, rectal feeding will have to be resorted to, and if this does not maintain the patient's strength an operation for the purpose of allowing the admission of food into the stomach will have to be resorted to. If the stricture is near the mouth, the œsophagus should be opened below the stricture, but if near the stomach, an opening will have to be made into this organ. Before food is introduced into the stomach it should be thoroughly masticated by the patient.

SUBACUTE GASTRITIS.

MILD INFLAMMATION OF THE STOMACH.

Subacute gastritis is a catarrhal inflammation of the mucous membrane of the stomach; characterized by slight fever, loss of appetite, nausea, with occasional vomiting, irregularity of the bowels and in severe attacks, dizziness.

The causes of it are various; it may be caused by exposure as other inflammations; errors of diet; the swal-

lowing of liquids either too hot or too cold; the abuse of alcoholic liquors; the eating of food which has begun to decompose; and it may occur as a complication of various diseases, such as malarial fever, scarlet fever, measles, small-pox, typhoid fever, etc.

SYMPTOMS: An attack usually commences with loss of appetite, heat, pain, and a sense of uneasiness in the region of the stomach, which is aggravated by taking food or liquids into this organ. The tongue is elongated and pointed, its tip and edges red; and as the disease advances there is considerable thirst; flashes of heat; more or less fever; and burning sensations in the palms of the hands and soles of the feet. Nausea with more or less vomiting is almost a constant symptom; the material vomited first consisting of undigested food, but afterwards of a colorless, ropy mucus, or mucus colored yellowish or greenish by bile.

Vertigo, with pain in the back of the neck, is frequently met with, especially in severe cases, and is quite troublesome, causing the patient great anxiety and depression of spirits.

The bowels, in some cases, are loose, while in others they are constipated.

The urine is usually scanty and high-colored.

The disease usually terminates in a slow recovery in from a week to ten days.

TREATMENT: If the bowels are constipated the treatment should be commenced by the administration of the following:

Calomel, 1 grain,
 Bicarbonate of Soda, 10 grains,
 Powd. Ipecac, 1 grain.

Mix and divide into five powders and give one every hour. Should they fail to act on the bowels, use an enema or give Oil, Salts or a Seidlitz Powder.

Fever, when present, should be controlled with Aconite, adding Gelsemium where there is flushed face, bright eyes and contracted pupils; or the Belladonna where the patient is drowsy, the pupils being too large. For its effect on the stomach small doses of Ipecac should also be added as follows:

Tr. of Aconite Root, 18 drops,
 Fl. Ext. of Gelsemium, 27 drops,
 Fl. Ext. of Ipecac, 9 drops,
 Water, 18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while there is fever; or:

Tr. of Aconite Root, 18 drops,
 Fl. Ext. of Belladonna, 6 drops,
 Fl. Ext. of Ipecac, 9 drops,
 Water, 18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while there is fever.

The nausea and vomiting may usually be relieved by the administration of a Creosote Compound Tablet every hour and the use of a Mustard-Plaster over the region of the stomach. Should these means fail to quiet the stomach, see Irritation of the Stomach.

Great care should be exercised in feeding the patient even during convalescence.

After convalescence is fully established the following will be found very beneficial in toning up the stomach:

Fl. Ext. of Nux Vomica, 2 drachms,

Fl. Ext. of Hydrastis Can., 6 drachms,

Fl. Ext. of Gentian, 2 ounces,

Fowler's Solution of Arsenic, $\frac{1}{2}$ drachm,

Aromatic Elixir, sufficient to make, 4 ounces.

Mix and give a teaspoonful three times a day before meals.

ACUTE GASTRITIS.

ACUTE INFLAMMATION OF THE STOMACH.

This is a violent inflammation of the mucous, sub-mucous, and muscular coats of the stomach, with destruction of its tissue; characterized by intense pain, nausea, persistent vomiting, usually of bloody mucus and whatever may have been ingested, and great prostration.

It is usually caused by ingestion of irritant or corrosive drugs, such as Carbolic Acid, Arsenic, Corrosive Sublimate, Copper, the mineral Acids, etc., etc.

SYMPTOMS: Soon after swallowing the poison, the patient experiences a dull, uneasy feeling in the region of the stomach, which rapidly increases until there is deadly nausea, violent and persistent vomiting, first, of the contents of the stomach, afterwards, of blood or bloody mucus and shreds of the mucous membrane. Thirst becomes intense, and when water is given it increases the pain and vomiting. There is, in many cases,

high fever, a quick, thready pulse, and difficulty in swallowing, especially where the œsophagus is involved.

The urine becomes scanty and high-colored, and the bowels constipated; however, in some cases there may be diarrhœa. The foregoing symptoms soon give place to a condition of collapse, accompanied by constant hic-cough. The pulse grows weaker, hour by hour, until it can not be felt at the wrists; breathing is hurried, short and irregular; the surface of the body is cold and clammy; the mind remaining clear until a short time before death.

Sometimes, though rarely, the symptoms of prostration just mentioned are followed by reaction instead of death, and the patient slowly recovers, the stomach, however, remaining crippled for life.

TREATMENT: Ascertain, if possible, the nature of the poison and administer the proper antidote at once, after which the stomach should be thoroughly washed out by means of the stomach-pump or tube.

Administer a full dose of Morphine hypodermically at once and repeat the dose sufficiently often to control the pain.

Ice should be applied to the stomach, and in order to allay the thirst to some extent small pieces of it may be swallowed at frequent intervals. If the ice can not be obtained, apply hot cloths over the region of the stomach.

From 10 to 30 grains of the Subnitrate of Bismuth should be given every hour and the patient required to remain perfectly quiet.

If the bowels become constipated, they may be moved by means of an enema of warm soap-suds. Nourishment should also be administered in this manner, allowing nothing in the way of food but milk and Lime-Water to enter the stomach.

CHRONIC GASTRITIS.

CHRONIC GASTRIC CATARRH.

This is a chronic inflammation of the mucous membrane of the stomach; characterized by tenderness over the region of this organ; impaired appetite; imperfect and painful digestion with lowness of spirits.

The most common causes of it are repeated attacks of the subacute variety; the excessive use of alcoholic liquors; over-eating, and the imperfect mastication of food, especially highly seasoned articles.

SYMPTOMS: There is usually more or less distress and pain in the region of the stomach, especially after eating or when pressure is made over this organ. The appetite becomes impaired; digestion imperfect and painful; and gas frequently accumulates in the stomach, which, when passed by the mouth, is very offensive. The bowels are constipated, or if the intestines are involved there is diarrhœa. The urine is scanty and high-colored; the tongue coated with a whitish fur, the tip and edges being almost always red.

The pulse is usually quick and small; the extremities cold, and if relief is not obtained, loss of flesh takes place more or less rapidly. There is, sooner or later, lowness

of spirits, sleeplessness, occasional attacks of dizziness, and the patient may live a number of years in constant misery.

TREATMENT: In chronic gastritis, as in all other diseases of the stomach, one of the most important things to be attended to is the regulation of the patient's diet. All articles of food containing a considerable amount of sugar, starch or fat, and those that produce an unpleasant sensation in the stomach, should be abandoned. A milk-diet should be enjoined, especially while the more urgent inflammatory symptoms are present. After these symptoms have subsided, beef, eggs, oysters, and a few fresh vegetables, in small quantities, may be allowed.

If there is nausea, give a Creosote Compound Tablet every hour, or instead of this, from 5 to 10 grains of the Subnitrate of Bismuth may be given every hour. See Irritation of the Stomach.

A Compound Tar Plaster should be applied over the region of the stomach and worn almost constantly, removing it only when the parts become so sore that it can not be borne, and, then, only long enough for the irritation to subside. This should be continued until all tenderness in the region of the stomach has disappeared.

If the bowels are constipated, give 10 or 15 drops of the Fl. Ext. of Cascara Sagrada, three times a day, either increasing or diminishing the dose according to its effects on the bowels.

When the irritation subsides, the following should be given:

Fl. Ext. of Nux Vomica,.....3 drachms,
 Fl. Ext. of Hydrastis Can.,.....1 ounce,
 Fl. Ext. of Gentian,.....3 ounces,
 Fowler's Solution of Arsenic,...1½ drachms,
 Aromatic Elixir, sufficient to make, 6 ounces.

Mix and give a teaspoonful three times a day before meals.

Should digestion be very feeble, from 15 to 60 grains of pure Pepsin should be taken with each meal.

In order to avoid a relapse great care must be exercised in eating during convalescence.

IRRITATION OF THE STOMACH.

VOMITING.

Vomiting is a symptom frequently met with, not only in inflammation of the stomach, but in many other diseases, and is sometimes quite troublesome, if not actually dangerous, therefore, a separate notice of it is given.

TREATMENT: Apply a Mustard-Plaster over the region of the stomach; or cloths wet with the White Liniment, and if the bowels are constipated give the following:

Calomel,.....1 grain,
 Powd. Ipecac,.....1 grain,
 Bicarbonate of Soda,.....10 grains.

Mix and divide into five powders and give one every hour. Where the bowels are not constipated the following may be used instead of the foregoing:

Subnitrate of Bismuth,.....48 grains,
 Oxalate of Cerium,.....6 grains,
 Hydrochlorate of Cocaine,.....1 grain,

Creosote, 3 drops,
Water, sufficient to make, 1 ounce.

Mix and give a teaspoonful every hour.

Creosote Compound Tablets are almost a specific for vomiting. One of them may be given every hour, as is necessary. They may be obtained at any first-class drug store.

The Sulphate of Morphine in from $\frac{1}{6}$ to $\frac{1}{4}$ -grain doses, hypodermically, will give relief in many cases where everything else has failed.

The following is also useful:

Subnitrate of Bismuth, 36 grains,
Oxalate of Cerium, 3 grains,
Powd. Ipecac, 3 grains,

Mix and divide into six powders and give one of them in a teaspoonful of strong Mint-Water every hour.

Ice-Water, allowing a very small quantity at a time, is beneficial.

Mint-Water, as a drink at frequent intervals, is also useful.

Lime-Water, in tablespoonful doses every two or three hours, answers a good purpose.

Purified Charcoal (Carbo Ligni) in from 5 to 10-grain doses every hour or so as the occasion demands, is efficient.

Allow no food, and, water very sparingly, until the stomach is relieved. If there is danger of starvation, liquid food may be administered by enemas.

GASTRIC ULCER.

ULCERATION OF THE STOMACH.

Gastric ulcer is a solution of continuity of a portion of the mucous membrane and other tissues of which the walls of the stomach are composed; characterized by pain, tenderness, disorders of digestion, and more or less vomiting of blood.

Its causes are not very well understood, however, the principal cause is probably an obstructed circulation of blood in the walls of the stomach.

It may result from blows over the region of the stomach, tuberculosis, syphilis, burns of the integument, disorders of menstruation, etc. It is more common in young females than in others.

SYMPTOMS: These are indigestion; constant pain at the "pit of the stomach," which is increased by taking food, especially of an irritating character; tenderness of the stomach and more or less vomiting. If the ulcer is located near the cardiac orifice of the stomach, the vomiting occurs soon after eating, but if it is near the pylorus, it occurs an hour or so afterwards. The ejected matter may consist of indigested particles of food or simply acrid mucus. Vomiting of large quantities of bright-colored blood is almost a positive symptom of gastric ulcer. Where the blood remains in the stomach a considerable time before being ejected it may be dark in color.

The general condition of patients afflicted with gastric ulcer is variable; some, are greatly emaciated, while the nutrition of others is not much impaired.

The ulcer is usually slow in forming, the average duration being probably about a year; however, cases are recorded in which the disease developed suddenly and resulted in perforation of the stomach, peritonitis and death within two weeks, but such cases are exceedingly rare.

With proper treatment the majority of cases recover. The dangers are perforation, peritonitis and fatal hemorrhage, death, however, from the latter being rare.

TREATMENT: Give the stomach as near absolute rest as possible. This may be accomplished to a great extent by requiring the patient to maintain the recumbent posture in bed and rectal alimentation. When this method of feeding fails to give satisfactory results the diet must consist of milk and Lime-Water. The proper amount of milk is 3 or 4 ounces every three or four hours. Sugars and starches must be avoided.

Pain may be controlled with small doses of the Sulphate of Morphine as is required.

Vomiting may usually be relieved by from 10 to 30-grain doses of the Subnitrate of Bismuth. See Irritation of the Stomach.

Should hemorrhage occur give the following:

Fl. Ext. of Ergot,.....4 drachms,

Fl. Ext. of Rhus Aromatica,.....4 drachms.

Mix and give a half teaspoonful every half-hour or hour as the urgency of the case demands. The Acetate

of Lead is also an efficient remedy in controlling hemorrhage of the stomach. It may be given in from 1 to 5-grain doses. Where the stomach is very irritable the Fl. Ext. of Ergot, administered hypodermically, in from 10 to 20-drop doses is probably our most efficient remedy for controlling hemorrhage of the stomach.

For the ulcer 1 or 2 drops of Fowler's Solution of Arsenic should be given every five or six hours. The following also gives good results in these cases:

Fl. Ext. of Hydrastis Can., 1 ounce,
Fl. Ext. of Echinacea, Angust., ... 2 ounces,
Fowler's Solution of Arsenic, ... 1½ drachms,
Water, sufficient to make, 6 ounces.

Mix and give a teaspoonful four times a day.

If the bowels are constipated from 20 to 30 grains of the Phosphate of Soda should be given each night, as is required, and the patient instructed to form the habit of going to stool at a certain hour each day.

Should perforation occur Morphine should be given, perfect quietude enjoined and a competent surgeon called at once, as an operation offers the only hope.

Persons afflicted with ulceration of the stomach should live very temperate lives.

GASTRIC CARCINOMA.

CANCER OF THE STOMACH.

Cancer of the stomach is a peculiar malignant growth usually occurring near the outlet (pylorus) of the stomach, destroying the tissues of this organ and involving the lymphatic glands; characterized by symptoms of dyspepsia,

pain, vomiting and a marked impairment of the general health.

Males are more subject to it than females, and it is most frequently met with between the ages of forty-five and sixty-five. It is usually the result of an inherited predisposition and is always fatal.

SYMPTOMS: The symptoms of cancer of the stomach are rather similar to those of ulceration of this organ. The pain, however, is more violent, and the material vomited usually resembles coffee-grounds, very rarely, if ever, consisting of pure blood.

Where the cancer is near the cardiac orifice (entrance to the stomach), there is usually vomiting soon after eating, and when near the pylorus (outlet), it occurs some hours after taking food.

Pain of a dull heavy character, increased by pressure or food is almost a constant symptom. Swelling (œdema) of the ankles may occur as early as the third month, and progress to a general dropsy.

The bowels become constipated, the patient anæmic and emaciated; the skin sallow or fawn colored; the lymphatic glands, especially of the neck and groins, enlarge; and in a majority of cases a tumor, which is almost characteristic, may be felt in the region of the stomach. Jaundice and enlargement of the liver frequently occur, and there is not infrequently albumen in the urine.

The average duration of the disease is about a year, the patient dying from exhaustion, peritonitis or hemorrhage.

TREATMENT: The disease is incurable, therefore, all that can be done is to palliate, as much as possible, the patient's suffering and thereby smooth his pathway to the grave.

When there is pain in the stomach from 10 to 20 grains of the Subnitrate of Bismuth may be given. Should this fail to afford relief, as it frequently will, give from $\frac{1}{8}$ to $\frac{1}{4}$ of a grain of the Sulphate of Morphine, preferably hypodermically.

Where there is acidity of the stomach give the following:

Carbolic Acid,.....	32 drops,
Gum Arabic,.....	1 drachm,
Water,.....	4 ounces.

Mix and give a teaspoonful three times a day.

The Fl. Ext. of Cascara Sagrada, in from 5 to 30-drop doses, or Phosphate of Soda in from 10 to 20-grain doses, should be administered two or three times a day, as is needed when the bowels are constipated.

The persistent use of Fowler's Solution of Arsenic in 1 or 2-drop doses four times a day, is said to materially retard the development of cancer of the stomach, but this lacks confirmation.

The diet should be administered in fluid form, selecting such articles as the patient, from experience, has found to disagree with him the least.

If the stomach will not tolerate food, rectal alimentation (the introduction of liquid food, by means of a syringe, into the last intestine) will have to be resorted to.

Stimulants must be avoided. See Hemorrhage of the Stomach.

HÆMATEMESIS.

HEMORRHAGE OF THE STOMACH.

Hemorrhage of the stomach, strictly speaking, is not a disease, but a symptom, however, it is of sufficient importance to demand a separate notice.

It may result from ulcer, or cancer, of the stomach, the swallowing of corrosive poisons, congestion of the liver or spleen, malarial fever, yellow fever, etc., or it may be vicarious at the menstrual period.

SYMPTOMS: In addition to the symptoms of the disease causing it, there is, when the hemorrhage is rather free, coldness of the surface of the body, especially of the extremities; a feeling of warmth and distension in the stomach, which, when the hemorrhage is profuse, is followed by faintness or fainting, nausea and vomiting of blood. When the blood is immediately thrown out of the stomach, it is fluid and of a bright color, but when it remains in the stomach for a while it consists of dark-colored clots.

Hemorrhage of the stomach may sometimes be confounded with hemorrhage of the lungs. In the latter the blood is a bright red or scarlet and frothy; is coughed up not vomited, and there is usually symptoms of a lung-trouble.

TREATMENT: Put the patient to bed and require him to remain perfectly quiet. Give from 10 to 30 drops of the Fl. Ext. of Ergot, preferably hypodermically every

half-hour or so as the urgency of the case demands. The following is also very efficient:

Fl. Ext. of Ergot,.....4 drachms,

Fl. Ext. of Rhus Aromatica,....4 drachms.

Mix and give a half-teaspoonful every half-hour or so until relieved. Ice internally and applied over the region of the stomach is also beneficial. The Sulphate of Morphine in from $\frac{1}{8}$ to $\frac{1}{4}$ -grain doses, preferably hypodermically, may also be administered in order to quiet the patient's fears.

Should the foregoing means fail, give from 3 to 5 drops of Monsel's Solution of Iron (Liquor Ferri Subsulphatis), largely diluted with water, every half-hour or so until relief is obtained.

In these cases, the rectum (last intestine) should be substituted for the stomach and nutritious food, in a liquid form, introduced into it by means of a syringe for a few days.

DYSPEPSIA.

INDIGESTION.

"Dyspepsia is a term applied to all conditions of imperfect digestion that are not dependent on changes of structure in the digestive organs. The causes of dyspepsia are numerous, and the symptoms, consequently, vary greatly in different cases."

"The secretion from the mucous membrane may be scanty, or too profuse; the gastric juice may be deficient or excessive, or changed in quality; the muscular movements may be impaired; the pancreatic and intestinal

juices may be deficient in quantity and quality; or there may be an irritable or prostrated condition of the nervous system."

SYMPTOMS: A feeling of weight and tension in the region of the stomach, with a bad taste in the mouth, foetid breath, nausea, which may extend to vomiting, heavily coated tongue, sometimes a disgust for food, unpleasant eructations for several hours after eating, and alternating constipation and diarrhœa, are the symptoms that indicate an excessive secretion of mucus.

Continued irritation of the stomach, heart-burn, both before and after eating, a feeling of soreness when the stomach is distended, and an annoying, contracted feeling when emptied, indicate a scanty mucous secretion. Irritation of the stomach, accompanied by slight pain and water-brash, indicate an increased secretion of the gastric juice.

"Distention of the stomach, with an uneasy sensation of fullness, the rumbling of gases, the absence of pain, a general sluggish condition of the system, and continued constipation indicate impaired muscular action. A feeling of 'goneness' in the stomach with distress after eating, and great irritability that causes everything to be rejected as soon as swallowed, indicate derangement of the nervous system, which may be due to disease of the spinal cord."

"From the deranged digestion that constitutes dyspepsia, we necessarily have feeble and imperfect nutrition and derangement, to some extent, of all the functions of

the body. Loss of flesh and strength also ensues if the disease continues. The general symptoms of pain, burning sensation and soreness in the stomach, tenderness on pressure, dragging weight and tension, always indicate the presence of some form of indigestion.”—Gunn.

TREATMENT: Regulate the diet. Prohibit saccharine, starchy, or fatty articles of food and also all other articles that the patient has found, by experience, disagrees with the stomach. Require him to eat very slowly and masticate his food thoroughly. If he use tobacco, tea, or coffee, require him to use them very moderately or abandon them altogether. If the patient suffers with heartburn instruct him to eat no corn-bread until he is fully convinced that it is not the cause of the acidity. Forbid the use of alcoholic drinks in any form.

Acidity of the stomach, or heart-burn, when present, may usually be relieved by 10-grain doses of the Subnitrate of Bismuth administered at the time of the acidity. Should this fail, give 2 or 3 drops of Hydrochloric Acid, well diluted with water, half an hour before each regular meal.

Where digestion is very feeble it may be aided by a full dose of Pepsin after each regular meal.

The following is almost a specific in dyspepsia:

Fl. Ext. of Nux Vomica,.....	3 drachms,
Fl. Ext. of Hydrastis Can.,.....	1 ounce,
Fl. Ext. of Gentian,.....	3 ounces,
Tr. of Capsicum,.....	1 ounce,
Fowler's Solution of Arsenic,.....	48 drops,
Aromatic Elixir, sufficient to make,...	6 ounces.

Mix and give a teaspoonful before each regular meal.

If the bowels are constipated give a sufficient amount of the Fl. Ext. of Cascara Sagrada, after each regular meal, to cause one action a day from the bowels, and instruct the patient to form the habit of going to stool at a certain hour each day.

INTESTINAL DYSPEPSIA.

INTESTINAL INDIGESTION.

“As only part of the process of digestion is completed in the stomach, this organ may be in a healthy condition and yet intestinal digestion may be impaired.

The abuse of cathartic medicines, the continued use of indigestible articles of food and the irritating products of stomach dyspepsia, act in producing this disorder.”

SYMPTOMS: “Although sufficient food is taken and no trouble is felt in the stomach, yet the patient is not properly nourished, as is manifested by loss of strength and energy and continued constipation. When the bowels do move, the fæces are semi-fluid and irritating, the face is contracted and pinched, there is uneasiness about the navel, the skin is dry and harsh, the pulse frequent, the urine scanty and the nervous system irritable.”
—Gunn.

TREATMENT: Regulate the bowels with the Fl. Ext. of Cascara Sagrada or the Phosphate of Soda; knead the abdomen every day and adopt the treatment recommended for dyspepsia of the stomach.

GASTRALGIA.

NEURALGIA OF THE STOMACH.

Neuralgia of the stomach, or stomachic colic, as it is sometimes called, is a painful condition of the sensory nerves of this organ; characterized by paroxysms of excruciating pain, feebleness of the heart's action, coldness of the extremities and symptoms of collapse.

It may be induced by errors in diet, exposure to cold, fatigue, malaria, cancer, or ulcer, anæmia, and a rheumatic or gouty diathesis. Dr. Loomis says: "Hysteria and hypocondriasis are its two most frequent causes."

SYMPTOMS: It usually commences with a feeling of fullness or tightness in the stomach, followed by paroxysms of pain of the most excruciating character.

During these paroxysms the heart's action, in severe cases, becomes weak and irregular, the extremities cold, the countenance pinched, and there are symptoms of fainting. Convulsions sometimes occur, however, this is rare. Tenderness in the region of the stomach is not common, in fact, the pain is generally relieved to some extent by firm pressure.

An attack usually lasts from a few minutes to one or two hours, the pain gradually subsiding, or the attack terminates abruptly with eructations of gas, or the vomiting of an acid or alkaline fluid.

These attacks are liable to recur, from time to time, but are not generally considered dangerous to life.

TREATMENT: The $\frac{1}{4}$ of a grain of the Sulphate of Morphine will promptly relieve the pain, especially when

administered hypodermically. Laudanum, or Paregoric is also efficient. In the absence of any or all of these, Pepper or Ginger may be used, however, these are far inferior to the preparations of Opium just mentioned. In all cases apply cloths, wrung out of water, as hot as can be borne.

If the pain comes on periodically Quinine should be given as in common chills.

If the patient is anæmic give the following tonic:

Fl. Ext. of Nux Vomica, 3 drachms,

Fl. Ext. of Hydrastis Can., 1 ounce,

Fowler's Solution of Arsenic, 48 drops,

Aromatic Elixir, sufficient to make, 6 ounces.

Mix and give a teaspoonful before each regular meal.

If the bowels are constipated, they must be regulated, and if there is a rheumatic or gouty diathesis, appropriate remedies for these diseases should be given. The diet should be well regulated and exposure of every variety avoided.

INTESTINAL COLIC.

COLIC.

Colic is a spasmodic contraction of the muscular layer of the walls of the intestines; characterized by severe, paroxysmal, griping pains in the umbilical region with more or less constipation and vomiting.

Several varieties of the disease were formerly recognized by medical writers, but as these with the exception of lead colic, which will receive a separate notice, are only

different grades of the same affection, this classification is commonly disregarded by modern authorities.

The most common causes of colic are the presence of acrid or indigestible food, irritating secretions, the accumulation of gas in the intestinal canal, and constipation, especially in those who are not accustomed to this condition.

SYMPTOMS: "There are attacks of pain, spreading from the navel over the abdomen, alternating with intervals of ease. The pain is tearing, cutting, pressing, most frequently twitching, pinching, accompanied by peculiar bearing-down pains. The patient is restless and seeks relief in changing his position and in compressing the abdomen; his surface may be cold and his features pinched. The pulse is small and hard. The abdomen is tense, whether puffed up or drawn inward. There are often nausea and vomiting, and a desire for stool. There is usually constipation, but sometimes the bowels are regular or even too loose. Duration from a few minutes to several hours, relaxing at intervals. The attack ceases suddenly, with a feeling of the greatest relief, although some soreness remains for a few days."—Romberg.

TREATMENT: First, relieve the pain. This may be accomplished by the administration of $\frac{1}{4}$ of a grain of the Sulphate of Morphine. The relief will be more prompt if the Morphine is used hypodermically. Laudanum, Paregoric or Dover's Powder may also be used for the relief of pain in these cases. If none of these remedies

are at hand hot teas, such as Capsicum and Ginger may be used. Cloths wrung out of hot water should be applied to the abdomen and changed as they become cool.

If the bowels are constipated, Oil or Salts should be given as soon as the pain is relieved. Care in eating should be exercised for a few days.

COLICA PICTONUM.

PAINTER'S OR LEAD COLIC.

Painter's or lead colic is the result of poisoning by lead; characterized by slate-colored skin, a sweetish, metallic taste, obstinate constipation, impaired appetite, slow pulse, scantiness of urine, severe pain in the abdomen, paralysis or dropping of the wrists, and a bluish line along the edge of the gums.

The cause of it is the presence of a sufficient amount of lead in the system to act as a poison. It may enter the system through the stomach or the skin. Painters and persons employed in smelters and the manufacture of lead-paints are more subject to it than others, however, lead-poisoning has been repeatedly produced by sleeping in newly painted rooms, using water from lead pipes or vessels lined with lead.

SYMPTOMS: In addition to the symptoms of ordinary colic, in this, the pain is more severe, comes on gradually, and frequently extends to the back, upper extremities, hips, thighs and legs. The abdominal walls are tense, hard and knotted, the umbilicus (navel) frequently drawn upward. The bowels are obstinately constipated, but

not tender upon pressure, neither does pressure alleviate the pain.

The skin is usually soft and moist and of a slate-color; the tongue broad and pale; a sweetish metallic taste in the mouth, and in a majority of cases there is a blue line along the edge of the gums, and a dropping of the wrists caused by paralysis of certain muscles of the forearm.

An attack usually terminates in from two to fifteen days.

TREATMENT: Relieve the pain as you would in ordinary colic and then give Oil, Salts or Seidlitz Powders every three or four hours until free action from the bowels is obtained.

In order to eliminate the lead from the system, give from 10 to 20 grains of the Iodide of Potash after each regular meal.

A recurrence of the trouble may be prevented by avoiding the cause.

Care should be exercised in eating during, and for a few days after an attack.

CHRONIC CONSTIPATION.

Constipation is a functional inactivity of the bowels; characterized by a change in the character and frequency of the stools.

It may be due to diminished action of the muscular coat of the intestines, causing lessened peristalsis (worm-like motion), or to diminished intestinal and biliary secretions, or to both. The condition is not infrequently the result of indigestion, the habitual use of cathartic medi-

cine or opium, an improper quality and quantity of food, irregular habits of the patient, and lead-poisoning.

TREATMENT: The diet of persons suffering with chronic constipation must be well regulated, a considerable portion of each meal consisting of vegetables, ripe fruit, cooked fruit or vegetables. In many cases the bowels may be regulated by the diet alone.

The patient must be instructed to go to stool at a certain hour each day, and remain a sufficient time to allow a thorough evacuation of the bowels. These instructions must be rigidly enforced.

The strict observance of the foregoing instructions, and the following, taken regularly, will usually result in a complete cure.

Fl. Ext. of Nux Vomica,.....2 drachms,
 Fl. Ext. of Belladonna,.....48 drops,
 Fl. Ext. of Cascara Sagrada,.....1½ ounces,
 Aromatic Elixir, sufficient to make ..6 ounces.

Mix and give a teaspoonful before each regular meal, either increasing or diminishing the dose according to its effects on the bowels.

DIARRHŒA.

“LOOSENESS OF THE BOWELS.”

The term, diarrhœa, is used to denote frequent, fluid or semi-fluid, discharges from the bowels, which is quite common during the warm season, especially among children. It is really only a symptom, and is met with in various diseases, but as it is considered in connection

with these, we will only notice two forms of it here: DIARRHŒA from irritation, and DIARRHŒA from atony.

Indigestion, indigestible food, unripe fruit, over-loading the stomach, excessive heat and age, seem to be the principal factors in inducing an attack. Children artificially fed are more subject to it than others, and those passing through their second summer are especially liable to it.

Out of nearly 2000 fatal cases reported by Holt, only 3 per cent were exclusively breast-fed. Usually the disease has its origin in some error of diet. Bacteria have been found in the discharges, but this is no more than should be expected, as, wherever there is diseased, decaying, or dead matter, bacteria are sure to be present.

SYMPTOMS: In diarrhœa from irritation, the discharges from the bowels are green, or dark-colored, frequently containing more or less mucus and not infrequently blood. The discharges are sometimes so acrid that they inflame the parts with which they come in contact, especially when they have continued for some time. Uneasiness is usually manifested by the patient before having an action from the bowels, and there is some straining with the action. Fever, with a harsh, dry skin, and passive congestion of the brain, is quite common in these cases.

In diarrhœa from atony, the discharges are light-colored, watery, frequently containing particles of undigested food, and are passed without pain or uneasiness. The discharges, in this, are usually larger than in the preceding variety, but the amount of solid material is not increased. Where the disease

persists for some time, the child becomes relaxed, the skin cool and soft, the extremities cold, the face pale, and the circulation weak.

In both of the foregoing conditions, the appetite and digestion are impaired, and there is, consequently, loss of flesh and strength.

TREATMENT: In diarrhœa from irritation, commence the treatment by the administration of a full dose of Oil. After the Oil has acted on the bowels put the patient on the following:

Subnitrate of Bismuth,..... $1\frac{1}{2}$ drachms,
Sulpho-Carbolate of Zinc,..... 48 grains,
Powdered Bay Berry,..... 4 drachms.

Mix and divide into sixteen powders and give one every three or four hours. Should this fail to check the bowels, give the following:

Subnitrate of Bismuth,..... $1\frac{1}{2}$ drachms,
Fl. Ext. of Bay Berry,..... $\frac{1}{2}$ ounce,
Paregoric, sufficient to make,..... 2 ounces.

Mix and give a teaspoonful every three hours. This preparation will become thick after standing and it may become necessary to use a wire or knitting needle to stir it before pouring out a dose. Every two or three days a full dose of Oil should be given, as at the beginning of the attack, and thus continued until a cure is effected.

Control the fever with sedatives, administered according to indications as in any other disease. If there is a full, quick pulse, give Aconite and if the patient is sleeping

more than natural, sleeping with the eyes partly open, the pupils being too large, give Belladonna, thus:

Tr. of Aconite Root,.....18 drops,
Fl. Ext. of Belladonna,..... 6 drops,
Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half or two hours while there is fever.

If the fever is periodic, give the following during the intermission or remission:

Quinidine (alkaloid),.....1½ drachms,
Simple Syrup, sufficient to make,..2 ounces.

Mix and give a teaspoonful every three hours when there is no fever. In adults the Sulphate of Quinine may be used instead of the Quinidine.

In diarrhœa from atony give 3 or 4 drops of the Fl. Ext. of Nux Vomica three times a day, before meals and also the following:

Podophyllin,.....1 grain,
Sugar of Milk,.....1 drachm.

Mix thoroughly and divide into thirty powders and give one of them every three hours until the color of the discharges change to normal, or green, then, treat as a diarrhœa from irritation.

When the diarrhœa is controlled put the patient on the following tonic until his former health is regained:

Fl. Ext. of Nux Vomica,..... 3 drachms,
Fl. Ext. of Hydrastis Can.,..... 1 ounce,
Fowler's Solution of Arsenic,.....48 drops,
Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful before each regular meal. These doses are for adults; see table of doses.

CHOLERA MORBUS.

Cholera morbus is an irritation of the mucous membrane of the stomach and bowels; characterized by violent pain in the abdomen, constant vomiting and purging, and cramping of the muscles of the abdomen and extremities. It is a disease of warm weather, cases of it being rarely seen during other seasons of the year.

The most common causes of it are a fermentation of the food in the stomach and bowels, the eating of food in a state of fermentation, such as fruit, vegetables, "canned goods," etc. In a great majority of cases it is probably a result of ptomain poisoning.

SYMPTOMS: Cholera morbus usually makes its appearance with pain in the region of the umbilicus (navel), nausea, a feeling of prostration and a desire to evacuate the bowels. This is soon followed by almost incessant vomiting and purging. The discharges from the bowels are, at first, large, watery and feculent, but if the attack is severe, or protracted, the discharges soon partake of the character of the "rice-water" discharges of Asiatic cholera. The matter vomited, at first, consists of the ordinary contents of the stomach, but afterwards, of a watery material, which is sometimes mixed with bile.

The pain in the bowels varies in different cases; in some, it is slight, while in others it is of the most excruciating character, and is attended with severe cramping

of the muscles of the abdomen, arms and lower extremities.

The urine is scanty and high-colored and frequently suppressed; the mouth dry, thirst intense, but water is rejected almost as soon as swallowed. The pulse is weak, quick, and, in severe cases, irregular; the patient is greatly exhausted; the skin cold, shrunk and frequently covered with a clammy perspiration. If relief is not obtained, the patient grows weaker hour by hour; the mind wanders; there are involuntary discharges from the bowels, and death soon closes the scene. This, however, is only an occasional termination of cholera morbus, as scarcely 5 per cent of the cases die under proper treatment.

TREATMENT: The treatment of cholera morbus should be commenced by the hypodermic injection of $\frac{1}{4}$ of a grain of the Sulphate of Morphine, to be repeated in a half-hour if there is no improvement. In the absence of the hypodermic syringe, the dry Morphine may be placed on the back part of the tongue and swallowed. Should it be immediately rejected, the dose must be repeated at once, closely watching its effects; or if it is retained and no relief follows, in the course of thirty minutes, the dose must be repeated. In cases where the stomach will not retain the Morphine, 1 drachm of Laudanum mixed with two or three ounces of warm starch-water may be injected into the rectum (last intestine) immediately after an evacuation from the bowels, and the patient instructed to retain it as long as possible. Should it be expelled the dose must be repeated.

Chloroform is also an excellent remedy in these cases. The dose of it is from 15 to 30 drops, in sweetened water every twenty or thirty minutes.

Fluids must be withheld as much as possible, however, in order to quench the thirst to some extent, small lumps of ice or a teaspoonful of ice-water may be occasionally allowed.

Cloths wrung out of hot water, should be applied to the stomach and bowels, and if the cramping in the extremities is severe, friction with Mustard, will usually give relief. The Tr. of *Dioscorea Villosa* (Wild Yam) in 10 to 15-drop doses every half-hour, is highly recommended for the cramping of cholera morbus, but our success with it has not been flattering.

Where the pulse becomes weak, stimulants, in the form of Whiskey or Aromatic Spirits of Ammonia should be given every half-hour, or oftener, as the condition of the patient demands. In addition to this, where the case is a very severe one, give from 1-40 to 1-30 of a grain of the Sulphate of Strychnine, preferably hypodermically, every two or three hours, and, at the same time, wrap the patient in a blanket wrung out of hot Mustard-Water.

Should diarrhœa remain after the other symptoms have subsided, it may usually be relieved with the Sub-nitrate of Bismuth. Should this fail to give relief treat it as you would an ordinary diarrhœa.

The diet must be carefully selected for a few days after an attack.

CHOLERA INFANTUM.

Cholera infantum is an acute catarrhal inflammation of the mucous membrane of the stomach and intestines together with an irritation of the sympathetic nervous system occurring in children during warm weather; characterized by vomiting, purging, abdominal pain, fever, intense thirst, great emaciation and prostration.

The most common causes of it are age, excessive heat, especially continuous, unwholesome food, and unsanitary surroundings. A majority of medical writers claim that teething is one of its principal causes, but, as this is a natural process, it, in all probability, has nothing whatever to do with its production.

Children passing through their second summer are especially liable to it; and it is more fatal in artificially fed children than in others. Out of 2000 fatal cases collected by Holt only .3 percent. were exclusively breast-fed.

Bacteriæ of the proteus class are usually present in the discharges.

SYMPTOMS: In many cases an attack of cholera infantum is preceded a few days, sometimes a week or more by diarrhœa, the child being feverish and usually fretful. While in other cases, the attack commences suddenly with vomiting and purging, preceded by pains in the abdomen, and soon followed by fever, an accelerated pulse and intense thirst.

The vomited matter, at first, consists of the ordinary contents of the stomach, but afterwards of a watery mucus, which is frequently mixed with bile.

The discharge from the bowels is watery, frequently containing particles of undigested food and more or less mucus of a yellow or greenish color, and not infrequently streaked with blood.

The fever is usually of a remittent type, the evening temperature commonly running quite high. The pulse is rapid, sometimes weak and irregular, and thirst is extreme, but when fluids are taken into the stomach they almost immediately excite vomiting.

In this, as in all other diseases where there is fever, there may be, and frequently is, congestion of the brain; the passive being the form most frequently met with.

These symptoms are attended by a rapid loss of flesh and strength; the eyes become sunken; the tongue red and dry, sometimes fissured, and bleeding; and, if relief is not soon obtained, the little patient passes into a stupor; the pulse grows weaker and weaker hour by hour; the skin becomes cold and clammy and death soon closes the scene.

The duration of an attack is from a few days to as many weeks.

TREATMENT: Control the fever with sedatives administered according to indications, adding small doses of Ipecac, thus:

Tr. of Aconite Root,.....	8 drops,
Fl. Ext. of Ipecac,.....	4 drops,
Water,.....	16 teaspoonfuls.

Mix and give a half-teaspoonful every hour and a half or two hours while there is fever. If the patient

sleeps more than natural, the pupils being too large, Belladonna should be added to the sedative, thus:

Tr. of Aconite Root,.....	8 drops,
Fl. Ext. of Ipecac,.....	4 drops,
Fl. Ext. of Belladonna,.....	5 drops,
Water,.....	16 teaspoonfuls.

Mix and give a half-teaspoonful every hour and a half or two hours while there is fever and keep the head cool and the feet warm. In addition to this give from 3 to 5-grain doses of Subnitrate of Bismuth, in Mint-Water, every two or three hours. Apply a Mustard or Spice-poultice over the stomach.

Should the foregoing fail to quiet the stomach give the following:

Creosote Compound Tablet,.....	one,
Water,.....	6 teaspoonfuls.

Mix and after the tablet is dissolved give a half-teaspoonful of the mixture every hour as is required to settle the stomach.

The following is also very useful for quieting an irritable stomach in these cases:

Subnitrate of Bismuth,.....	1 drachm,
Beechwood Creosote,.....	4 drops,
Muriate of Cocaine,.....	1 grain,
Oxalate of Cerium,.....	8 grains,
Water,.....	2 ounces.

Mix and give a teaspoonful every hour as is required to keep the stomach quiet.

Calomel is also an excellent remedy to quiet an irritable stomach. It may be used in the following form:

Calomel, 1 grain,
Powd. Ipecac, 1 grain,
Bicarbonate of Soda, 10 grains.

Mix and divide into five powders and give one every hour until all are taken

The bowels must be kept empty and for this purpose Oil may be administered every day or so as is required. Where the Oil cannot be retained enemas will have to be used.

If the fever is of a remittent type the following should be used.

Quinidine, 48 grains,
Simple Syrup, 1 ounce.

Mix and give ten drops every hour and a half during the remission. If after having given four doses of it the fever still remains down give it every four hours.

Where the stomach is very irritable 20 grains of the Sulphate of Quinine may be mixed with a teaspoonful of Vaseline and used every three or four hours by inunction instead of the Quinidine. The proper place to apply it is under the arms, in the groins, over the stomach and bowels and over the spine.

When the child becomes very weak it will be necessary to use Digitalis and Cactus, instead of the Aconite, and also stimulants such as Aromatic Spirits of Ammonia or Whiskey.

Thirst may be allayed to some extent, by allowing a small lump of ice occasionally, or by tying a small amount of pounded ice in a clean cloth and allowing the child to suck it. If the ice cannot be obtained a teaspoonful of cold water may be given occasionally. The stomach may sometimes be caused to retain water by giving the child all it cares to drink at one time, and after this is thrown off of the stomach then allowing a small drink.

Much of the success in the treatment of cholera infantum, depends upon the care and judgement used in feeding and nursing the patient.

Milk should compose the principal article of diet, adding a tablespoonful of Lime-Water to every four tablespoonfuls of milk. Beef-tea, chicken-tea, etc., may be allowed. Plenty of fresh air must be admitted into the sick chamber.

Do not change from one remedy to another too often, nor use too many remedies at one time.

The dose here recommended is for a child two years old. See Table of Doses.

CHOLERA.

Cholera is an acute, specific, infectious disease prevailing as an epidemic or endemic; characterized by violent, persistent purging, and vomiting of a peculiar fluid, resembling rice-water; severe muscular cramping, followed by prostration, collapse and death; or reaction after which a typhoid condition may develop.

It is produced by a specific poison, the comma bacillus of Koch. Cholera is but feebly contagious, if contagious at all, but is infectious.

The stools of those suffering with cholera are the principal, if not the only, channel of infection, and it is by a contamination of the drinking water with these that the disease is mainly propagated. There exists very little, if any, danger from being in the presence of those afflicted with it, however, the disease may be generated by inhaling or swallowing the emanations from the discharges.

SYMPTOMS: The symptoms vary in different cases; in some, an attack is preceded for a few days, by diarrhœa; while in others, it commences suddenly with chilliness, thirst, slight pain in the abdomen, and purging, attended by a decided feeling of weakness. The discharges are, at first, feculent and very profuse and are voided with considerable force, becoming more frequent, and watery as the disease advances, until they finally present the characteristic, greyish or whitish, rice-water-like appearance. Vomiting of a forcible character makes its appearance early in the attack. The vomited matter, at first, consists of the ordinary contents of the stomach, but afterwards, of the peculiar rice-water-like material like that discharged from the bowels. The patient becomes prostrated rapidly; thirst is intense, but when fluids are taken into the stomach, they almost immediately excite vomiting.

Cramping of the muscles of all parts of the body, but more severe in the calves of the legs, is usually present

and is almost unbearable. Breathing becomes difficult; the skin assumes a purplish hue; the eyes are sunken, and surrounded by dark rings; the nose is pointed; the cheeks are hollow; and the urine scanty or suppressed.

As the disease advances the temperature declines rapidly; the skin becomes cold and clammy; the pulse small and weak, sometimes imperceptible at the wrists; the tongue and breath are cold, the mind usually remaining clear to the last; however, the patient is indifferent to his danger. This is commonly designated the stage of collapse. It either terminates in death in from three to forty-eight hours, or in reaction.

When it terminates by the latter method, the temperature gradually rises; the pulse increases in strength; the countenance becomes more natural; breathing becomes free and easy; the vomiting and purging become less frequent and feculent; the flow of urine is increased and the patient slowly recovers; or a typhoid condition develops, which greatly retards recovery and may end in death. One peculiarity about the disease is, that the temperature usually rises after death, the body remaining warm for a considerable time.

An attack of cholera is not infrequently followed by a diphtheriic inflammation of the mucous membranes, abscesses in various parts of the body, more especially of the parotid glands, bronchitis, pneumonia, pleurisy, erysipelas, etc. Indiscretions in diet may cause a relapse. One attack does not render the patient immune from subsequent attacks.

TREATMENT: During the presence of cholera in a community the slightest diarrhœa should receive prompt treatment. The following, in these cases, is very efficient:

Subnitrate of Bismuth,..... $1\frac{1}{2}$ drachms,

Fl. Ext. of Bay Berry,..... $\frac{1}{2}$ ounce,

Paregoric, sufficient to make,.....2 ounces.

Mix and give a teaspoonful every two or three hours until relieved.

In an attack of cholera, as soon as the nature of the case is discovered, put the patient to bed; require him to remain perfectly quiet; do not allow him to assume the sitting posture at all; use a bed-pan or old cloths when there is a discharge from the bowels, and administer at once, hypodermically, $\frac{1}{4}$ of a grain of the Sulphate of Morphine. Should no relief follow in twenty or thirty minutes, the dose must be repeated, closely watching its effects. A $\frac{1}{4}$ of a grain of Morphine should be administered hypodermically every four or six hours, as it is required, throughout the attack.

Cloths wrung out of hot water should be applied to the abdomen and changed sufficiently often to prevent their becoming cool.

Vomiting and thirst may usually be alleviated to some extent by allowing a small lump of ice occasionally. Should this fail to control the vomiting, $\frac{1}{4}$ of a grain of the Hydrochlorate of Cocaine should be given every hour or so.

The cramping of the muscles may be relieved to some extent by rubbing the parts briskly and by the applica-

tions of heat, such as hot rocks, bricks or irons, to the parts, or by inhalations of Chloroform or Ether.

When the stage of collapse occurs, wrap the patient well with a blanket wrung out of hot Mustard-Water, then, apply hot rocks, bricks, irons, etc., and administer 1-20 of a grain of the Sulphate of Strychnine, hypodermically, every three or four hours. The hypodermic use of Whiskey, in large doses, is also very beneficial in these cases.

Should reaction occur and convalescence be established without complications, the following may be given:

Fl. Ext. of Nux Vomica,.....2 drachms,
Fl. Ext. of Hydrastis Can.,.....5 drachms,
Fowler's Solution of Arsenic,.....1 drachm,
Aromatic Elixir, sufficient to make,...4 ounces.

Mix and give a teaspoonful before each regular meal.

Where an attack is followed by a typhoid condition, or other complications, the case must be treated on general principles.

During convalescence the patient must remain quiet in bed; and water and food very sparingly allowed and, the latter, selected with the greatest care and judgement.

The stools, urine and vomited matter should be disinfected by pouring boiling water upon them, and then, buried.

During the prevalence of cholera, in a community, no one should eat any food, fruit, or vegetables that have not been thoroughly cooked and drink no liquids that have not recently been boiled.

CATARRHAL ENTERITIS; MUCO-ENTERITIS.

INFLAMMATION OF THE SMALL INTESTINES.

This is an acute inflammation of the mucous membrane of a whole or any part of the small intestines; characterized by pain and tenderness in the region of the umbilicus, fever, and looseness of the bowels, the discharges containing more or less mucus and in some cases shreds. It may be either acute or chronic.

The great majority of cases occur between the first of May and the last of September; therefore, we conclude that warm weather is one of its most important causes; and, when we add to this atmospheric changes, improper food and unhygienic surroundings the list of causes is probably complete. Children between the ages of six and eighteen months are much more subject to it than others.

A remarkable number of bacteria have been isolated from the stools. Booker claims to have discriminated forty varieties. It should be borne in mind that organisms are also found in healthy stools.

SYMPTOMS: An attack usually commences with more or less pain and tenderness in the region of the umbilicus followed by diarrhœa and fever, the temperature ranging from 102° to 103° , sometimes higher. The discharges at the beginning of the attack are usually not very frequent, but are attended by more or less pain and straining. The character of the stools varies in different cases; in nursing children, they at first, consist of a greenish material mixed with curdled milk; in other cases, they

are greenish or dark-colored, sometimes frothy. As the disease progresses more or less mucus, and, in some cases, shreds of mucous membrane, and, rarely, blood appear in the discharges, which are accompanied by increased pain and straining. The bowels are usually flat and shrunken, but in protracted cases may become swollen and tympanitic from an accumulation of gas. The tongue is usually furred with a whitish coat, its tip and edges being red, and nausea and vomiting are not uncommon.

The fever is of a remittent type, but if the disease is severe or protracted, it assumes a continued or typhoid type, when, the tongue becomes dark or purplish and sordes appear on the lips and teeth.

The average duration of an attack, is from four to fifteen days.

The disease is frequently mistaken for diarrhœa caused by irritation, and dysentery, but no particular harm results from this mistake as the treatment for the three diseases is almost identical.

TREATMENT: This should be commenced by the administration of a full dose of Oil or Salts for the purpose of thoroughly emptying the bowels; and the use of these remedies every two or three days during the attack should not be neglected. After the effects of the Oil or Salts have been obtained give the following:

Subnitrate of Bismuth,.....40 grains,

Sulpho-carbolate of Zinc,..... 2 grains.

Mix, divide into eight powders and give one of them every three hours.

Control the fever with Aconite adding Ipecac, as follows:

Tr. of Aconite Root,.....8 drops,

Fl. Ext. of Ipecac,.....8 drops,

Water,.....8 teaspoonfuls.

Mix and give a half-teaspoonful every hour and a half or two hours while there is fever. If the face is flushed, the eyes bright and the pupils contracted add $\frac{1}{8}$ of a drop of the Fl. Ext. of Gelsemium to each dose of the Aconite; or if the patient sleeps more than natural, the pupils being too large, instead of the Gelsemium add $\frac{1}{8}$ of a drop of the Fl. Ext. of Belladonna to each dose of the Aconite.

Where the fever is high and the pupils not larger than natural, a $\frac{1}{2}$ of a grain of Acetanilide should be given every three or four hours.

Add a tablespoonful of the Spirits of Turpentine to a quart of warm water and apply clothes, wrung out of it to the bowels, changing them frequently to prevent their becoming cool. If preferred, instead of the cloths, just mentioned, warm poultices may be used, however, the cloths usually answer a better purpose.

Nausea and vomiting, when present, may usually be relieved by the following:

Creosote Compound Tablets,.....one,

Water,.....6 teaspoonfuls.

Mix and when the tablet is dissolved give a half-teaspoonful every hour until relief is obtained. At the same time a Mustard-Plaster should be applied over the region of the stomach.

Where the tongue is broad, pallid and coated with a dirty, whitish, pasty material, give 2 grains of the Sulphite of Soda every four hours; or if the tongue is too red, or red and dry, give $\frac{1}{4}$ of a drop of Hydrochloric Acid, well diluted with water, every three or four hours.

If the tongue becomes dark or purplish Echinacea or Baptisia should be given. They may be added to the Aconite.

Where the fever is periodic Quinidine should be given during the intermission or remission. It may be prepared for use as follows:

Quinidine,.....	20 grains,
Simple Syrup,.....	1 ounce.

Mix and give 8 drops every hour and a half while there is no fever. If after having given four doses in this manner fever does not appear it should then be given not oftener than every three or four hours. Quinidine is a very important remedy in these cases, especially where there is a malarial complication. Where it cannot be obtained the Sulphate of Quinine may be used in its stead.

Where the fever assumes a continued or typhoid type treat it as such; and if diarrhœa continues after the inflammation has subsided, treat it as you would any other diarrhœa.

From the commencement of the attack keep the patient as quiet as possible and restrict the diet to such articles as milk and Lime-Water, weak mutton or chicken-soups with well-boiled rice added.

The dose given in this article is for a child one year old. See Table of Doses.

CHRONIC ENTERITIS.

CHRONIC DIARRHŒA.

This is a chronic inflammation of the mucous membrane of the small intestines, commonly known as chronic diarrhœa; characterized by fluid or semi-fluid stools, tenderness in the region of the umbilicus, loss of appetite, impairment of digestion, emaciation and sometimes a marked remittent fever, followed in the latter stages of the disease by hectic fever and night-sweats.

It may be the result of an acute attack of the disease, or it may be developed during the continuation of an ordinary diarrhœa, but the most common causes of it are the long use of improper food and exposure to excessive heat, especially of persons who have been accustomed to a cold climate.

SYMPTOMS: In chronic diarrhœa the patient has a variable number, sometimes ten or fifteen, again only two or three fluid or semi-fluid evacuations from the bowels during each twenty-four hours. The color of the discharges is variable, sometimes they are of a light clay-color or yellowish, at others dark or greenish, often containing mucus, shreds of mucous membrane and sometimes blood.

The appetite is more or less impaired, digestion enfeebled, the patient becoming greatly debilitated; and does not sleep well during the night. There is more or less

tenderness felt when firm pressure is made over the region of the abdomen.

Nervousness, with occasional pains in the head is quite common, and there is, in some cases, a well-marked type of remittent fever, which, in the latter stage of the disease, is sometimes followed by hectic fever and night-sweats.

TREATMENT: This should be commenced by the administration of the following:

Subnitrate of Bismuth,.....3 drachms,
Fl. Ext. of Myrica Cerifera,.....1 ounce,
Paregoric, sufficient to make,.....4 ounces.

Mix and give a teaspoonful every three or four hours as is required.

There are a variety of astringents that may be used in these cases, the most important of which are the following:

Tannin in from 5 to 20-grain doses four or five times a day; Nitrate of Silver in from $\frac{1}{4}$ to $\frac{1}{2}$ -grain doses three times a day; Sulphate of Copper in from $\frac{1}{4}$ to 1-grain doses three or four times a day; Acetate of Lead in from 1 to 3-grain doses and the Subnitrate of Bismuth in from 30 to 40-grain doses four or five times a day.

The daily irrigation of the bowels with one of the following solutions is of the utmost importance:

Salicylic Acid,.....160 grains,
Water,.....1 quart.

Mix and use at once, or:

Boracic Acid,.....5 drachms,
Water,.....1 quart.

Mix and use at once, or:

Tannin,.....160 grains,

Water,.....1 quart.

Mix and use at once, or:

Nitrate of Silver,.....8 grains,

Water,.....1 quart.

Mix and use at once.

All of the foregoing should be used warm. No appliance is needed except a fountain syringe with a soft rubber end-piece, which should be inserted well up into the bowel when, the fluid may be allowed to slowly flow. The patient should, as a rule, be placed in the knee-chest position in order to let the fluid be carried as high as possible.

Patients suffering with chronic diarrhoea should wear flannel next to the skin the entire year; avoid all exposure and intemperance. No definite rules in regard to diet can be given. Many patients do well on an exclusive milk-diet, while others do well on scraped beef, raw or underdone. In a majority of cases toast, tender beef or mutton, oysters, raw or boiled eggs, thoroughly cooked rice, arrow-root and plain custard may be allowed.

Foods that are bulky and leave much residue must be prohibited.

TYPHILITIS.

INFLAMMATION OF THE CÆCUM.

Typhilitis is an inflammation of the mucous membrane of the cæcum and ascending colon; characterized by fever, pain, tenderness, and, in some cases, vomiting of a material that has the odor of fæces.

Its most common cause is the presence of foreign bodies or the impaction of fæces within the cæcum.

SYMPTOMS: An attack usually commences with pain and tenderness with more or less fullness in the right iliac region and ascending colon. The bowels soon become distended with gas and are obstinately constipated, however, in some cases there may be small liquid stools.

From one to three degrees of fever is present in all cases; and there are nausea and vomiting; first, of the contents of the stomach, then, of the duodenum with bilious matter; and, if relief is not obtained, ultimately of a material having the odor of fæces.

With these last-named symptoms there is great depression of the vital powers; and, finally, by contiguity of tissue or by rupture of the bowel, peritonitis is developed and death soon closes the scene.

In other cases the bowels move freely and the patient is soon convalescent.

The usual duration of an attack is from one to two weeks.

TREATMENT: Put the patient to bed and require him to remain quiet; apply hot poultices over the painful region, changing them frequently in order to prevent their becoming cool.

Control fever, when present, with sedatives administered according to indications.

Administer a full dose of Salts every four or five hours until free actions from the bowels are obtained.

Should the Salts fail to act on the bowels promptly, copious injections of warm soap-suds should be frequently used.

If the pain is very severe, and the hot poultices do not relieve it, $\frac{1}{4}$ of a grain of the Sulphate of Morphine may be given, hypodermically, every four or five hours as is necessary, however, use no more Morphine than is absolutely necessary to make the patient's condition bearable.

If the vomited matter has the odor of fæces or if the symptoms of peritonitis develop, call a competent surgeon at once.

APPENDICITIS.

PERITYPHLITIS; PERITYPHLITIC ABSCESS.

Appendicitis is an acute or subacute inflammation of the appendix vermiformis, involving the surrounding tissues (with a localized peritonitis) leading to perforation of the appendix and the development of an abscess.

Perityphlitis is "an acute inflammation of the connective tissue around the cæcum (with localized peritonitis) leading to the formation of an abscess."

"Appendicitis usually results from the presence of a foreign body in its canal, consisting of inspissated fæcal masses, which becoming incrustated with lime salts, are termed fæcal calculi; and becoming rounded in shape closely resemble a cherry-stone, for which they have been mistaken. Foreign bodies, particularly seeds of fruit, sometimes, but not so often as is believed, by the laity, gain access to the appendix and produce inflammation

leading to perforation. Torsion of the appendix is also among the infrequent causes. The disease is more common in males than females. Occurs most frequently between the ages of ten years and thirty years. Relapses are rarely frequent in cases not progressing to perforation."

"The great majority of cases of perityphlitis are secondary to inflammation of or perforation of the vermiform appendix—appendicitis. Have seen two cases of true perityphlitis, the result of exposure to cold and wet."

SYMPTOMS: "The symptoms of the two conditions are much alike; begins with a feeling of weight, soreness and rapidly developing and severe pain in the lower right abdomen, accompanied with nausea and vomiting. The pain is increased by lying on the left side, the right leg is drawn, the abdomen becomes tense, prominent and tender, with the progressive development of a hard swelling in the right iliac region. The temperature at the onset is from 99° to 100° , and may or may not be preceded by a chill; the pulse 80, full and strong, the tongue coated with red tips, the bowels costive. In addition to the persistent, localized pain, occurs severe colicky paroxysms, which may shoot into the hip and thigh. The expression of the patient is pinched and suffering. The special tendency of the disease is towards suppuration, which is announced by irregular chills, feverishness, the temperature shooting suddenly to 101° - 103° , and sweats, and a feeling of tension and throbbing. Its develop-

ment is slow, and if associated with typhlitis the symptoms of that affection are added."

COMPLICATIONS: "Perforation of the appendix. Local or general peritonitis."

"DIAGNOSIS: Differs from typhlitis by the absence of colicky pains, dyspeptic symptoms, costive bowels and tympanites preceding the development of a tumor; in perityphlitis the tumor is present with the development of the symptoms."

"Psoas abscess is not associated with intestinal symptoms, and the discharge is free from a fæcal odor. Renal and ovarian tumors should not be sources of error. The possibility of a hernial tumor must not be overlooked."—Hughes.

TREATMENT: Put the patient to bed and require him to remain quiet, administer a full dose of Salts and apply poultices, as hot as can be borne, over the painful region. Should these means fail to give relief, call a competent surgeon at once.

DYSENTERY.

FLUX.

Dysentery is an inflammation of the mucous membrane of the colon, sometimes extending to the rectum (Proctitis); characterized by fever, griping pains in the bowels and tenesmus attended by frequent, small discharges of mucus, and sometimes shreds of mucous membrane, mixed with more or less blood and, in some cases pus.

Four forms of the disease are recognized; acute catarrhal, croupous or diphtheritic, chronic, amœbic or tropical. We shall make no distinction in its several forms in this article as it would be confusing to the minds of our readers, besides it would be of no practical benefit, the treatment of all forms of the disease being virtually the same. All forms of the disease prevail in North America and may occur either sporadically, endemically or epidemically.

Its most common causes are sudden atmospheric changes, improper food, bad hygienic surroundings and excessive physical exertion during warm damp weather. The amœbic form of the disease is caused by the amœba coli or the amœba dysenteria. Their mode of entering the system is not definitely known, however, the principal source is probably the drinking-water. Amœbic dysentery is not contagious but infectious.

SYMPTOMS: In many cases an attack is preceded two or three days by diarrhœa; in others, it commences with a chill or a sense of chilliness, which is followed by fever, an accelerated pulse, more or less pain and uneasiness in the bowels and the appearance of the characteristic stools. For the first day or two the discharges contain more or less fœcal matter but they soon change to mucus mixed with blood and sometimes pus. There are colicky pains in the region of the umbilicus; pain on pressure over the transverse and descending colon; a burning pain in the lower part of the rectum with an almost constant desire to go to stool; and when the bowels

act there is straining with a feeling as if more should pass. The stools are sometimes very numerous, amounting to as many as fifty, or even a hundred, during twenty-four hours. The urine is scanty and high-colored. Persistent nausea and vomiting are not uncommon.

The fever at the beginning of the attack is usually of a remittent type, but as the disease advances it frequently assumes a continued or typhoid type; the pulse becomes weak and quick or irregular, the tongue red and dry or rather a dark brown, and sordes appear on the lips and teeth.

In some cases the discharges from the bowels resemble prune-juice; while in others, they contain pus, patches of membrane and even casts of the bowel with more or less gangrenous mucous membrane of a very offensive odor. Prostration in these cases is great; the expression anxious and emaciation extreme.

Where relief is not obtained the patient grows weaker day by day and death soon closes the scene.

The duration of an attack is from a few days to weeks.

The disease may be complicated with abscess of the liver or lungs, intestinal perforation, peritonitis and inflammation of the intestinal veins.

TREATMENT: Put the patient to bed and require him to remain quiet; administer a full dose of Salts and as soon as it has acted on the bowels give the following:

Subnitrate of Bismuth, 2 drachms,

Fl. Ext. of Myrica Cerifera, $\frac{1}{2}$ ounce,

Paregoric, sufficient to make, 2 ounces.

Mix and give a teaspoonful every two or three hours, or:

Subnitrate of Bismuth, 2 drachms,

Sulpho-carbolate of Zinc, 36 grains,

Dover's Powder, 48 grains.

Mix, divide into twelve powders and give one of them every three hours. If relief is not obtained, within thirty-six or forty-eight hours, another dose of Salts should be given, and the other treatment continued as before. In many cases, especially mild ones, this is all that is required.

If the patient has fever, in addition to what has already been recommended give the following:

Tr. of Aconite Root, 18 drops,

Fl. Ext. of Ipecac, 18 drops,

Water, 18 teaspoonfuls.

Mix, and give a teaspoonful every hour and a half while there is fever. Of course, if there is flushed face with bright eyes and contracted pupils, Gelsemium should be added to the Aconite; or if the patient is sleeping more than natural, the eyes remaining partly open, the pupils being too large, Belladonna should be added instead of the Gelsemium.

Throughout the attack a sufficient amount of some form of Opium should be given to control the peristaltic action of the intestines. When the prescriptions containing the Paregoric or Dover's Powder are used no Opium should be given, as these remedies contain a sufficient amount of the drug to accomplish this. Where no other form of Opium is being used 6 or 8 drops of Laudanum

(Tr. of Opium) may be given every four or five hours. Where there is severe tormina it may be given every hour until the pain is relieved, however, care must be exercised not to introduce a sufficient quantity of it into the system, at one time, to act as a poison.

Pain may be controlled to a great extent by hot applications, such as hot poultices or cloths wrung out of hot Turpentine-water, to the bowels. If these applications are used they must be changed sufficiently often to prevent their becoming cool.

Where there is severe tenesmus the following usually affords marked relief:

Laudanum,.....	30 drops,
Starch,.....	1 teaspoonful,
Water,.....	4 ounces.

Mix and inject into the rectum requiring the patient to retain it as long as possible.

Should nausea and vomiting occur apply a Mustard-Plaster over the region of the stomach and give a Creosote Compound Tablet every hour. See Irritation of the Stomach.

If the fever is of a remittent type give Quinine during the remission as is recommended for remittent fever. If the patient is a child, Quinidine combined with Simple Syrup should be used instead of the Quinine.

If the fever assumes a typhoid type treat it as such. See Typhoid Fever.

Where there is ulceration of the bowels Iodoform should be added to the Bismuth, thus:

Subnitrate of Bismuth,.....2 drachms,
 Iodoform,.....12 grains.

Mix, divide into twelve powders and give one every four hours; and, at the same time, use the following:

Tannin,.....160 grains,
 Water,.....1 quart.

Mix and inject into the rectum two or three times a day, or:

Boracic Acid,.....5 drams,
 Water,.....1 quart.

Mix and use in the same manner, or:

Nitrate of Silver,.....8 grains,
 Water,.....1 quart.

Mix and use in the same manner.

Should these injections produce severe pain a small amount of a 4 per cent. solution of Cocaine may be injected into the rectum before using them.

Where the disease assumes a chronic form treat it precisely as you would Chronic Enteritis, which see.

The diet should consist of such articles as milk, chicken-soup, beef-soup, mutton-soup and soft poached eggs.

PROCTITIS.

INFLAMMATION OF THE RECTUM.

Proctitis is an inflammation of the mucous membrane of the rectum and anus; characterized by burning pain, tenesmus, and frequent discharges of hardened fæces, or mucus, pus and blood.

The most common causes of it are constipation; the presence of foreign bodies; sitting on cold, damp ground or stone; the continued use of such purgatives as Aloes; the frequent use of stimulating enemas; diseases of the liver; and hemorrhoids.

SYMPTOMS: It usually commences with tenesmus, a feeling of fullness and burning pains that extend from the region of the anus into the loins and back. There are frequent discharges of hardened fæces, sometimes mucus, blood and pus. These discharges are not infrequently attended by prolapsus of the rectum and difficulty in passing the urine, and in some cases strangury.

Feverishness with headache and loss of appetite are usually present; and, if the case is protracted or severe, there is liable to be an inflammation of the connective tissue surrounding the rectum, known as periproctitis, which usually terminates in the formation of pus and fistulous openings.

The disease sometimes terminates in a chronic form instead of the periproctitis.

The average duration of an attack is from five to ten days.

TREATMENT: Put the patient to bed and require him to remain quiet; and in order to liquify the stools give a full dose of Salts every three or four hours until the desired effect is obtained. If there are hardened fæces in the rectum, injections of large quantities of warm soap-suds should be frequently used until these are removed.

Warm poultices may be applied over the perinæum and lower part of the bowels; and, if the pain is very severe a $\frac{1}{4}$ of a grain of the Sulphate of Morphine may be given every four or five hours, preferably hypodermically.

In many cases, especially where the inflammation is not too far advanced, the disease subsides as soon as free actions are obtained from the bowels. Should convalescence not be established at this stage, or the disease assume a chronic form, remedies will have to be used locally by means of injections; and the following answers a good purpose in these cases:

Tannin,.....	20 grains,
Laudanum,.....	30 drops,
Carbolic Acid,.....	10 drops,
Starch,.....	1 teaspoonful,
Water,.....	4 ounces.

Mix and inject into the rectum at once. This should be repeated three or four times a day. The patient should be instructed to retain the material injected as long as possible.

If the patient has fever control it with sedatives administered according to indications as in any other disease.

If there is prolapsus of the rectum, replace it at once. This may be accomplished by applying an old, soft cloth, well anointed with Vaseline or common lard over the protruded part and making gentle, but firm, pressure with the finger-tips and thumb until the intestine is returned to its proper place.

Should the disease result in periproctitis and the formation of an abscess, the pus must be evacuated early by a free incision. A competent surgeon should be called to attend to this. If the patient is very weak it may be necessary to give stimulants; and where he is debilitated, the following tonic should be given:

Fl. Ext. of Nux Vomica,.....2 drachms,

Fl. Ext. of Hydrastis Can.,.....5 drachms,

Aromatic Elixir, sufficient to make,..4 ounces.

Mix and give a teaspoonful before each regular meal.

The diet should be the same as that recommended in dysentery

HÆMORRHOIDS.

PILES.

Hæmorrhoids, or piles, are tumors formed in the rectum or at the verge of the anus by an enlargement of the hæmorrhoidal blood vessels; characterized by pain, soreness and fullness in the rectum and more or less hæmorrhage in the internal variety.

There are two forms of hæmorrhoids; internal and external.

The condition may be caused by anything that interferes with the return of blood from the rectum, such as impacted fæces, habitual constipation, pregnancy, pelvic tumors, cirrhosis of the liver, valvular disease of the heart, etc. Sedentary habits and luxurious living are predisposing causes. It is thought that some persons possess a hereditary tendency to them.

SYMPTOMS: "The symptoms of hæmorrhoids vary with the size, number, stage and seat of the tumors. At first there is a feeling of weight and fullness in the rectum, or a sensation as if a foreign body were present. During and after a hard stool, there is a throbbing, aching, or burning pain, radiating to the loins or down the limbs. There is heat, soreness and tingling about the anus, and as the tumor increases in size, sitting becomes uncomfortable, and the individual grows restless, depressed, and anxious. The pain soon becomes constant and is always more severe after a passage or after a moderate walk."

"Internal hæmorrhoids have as their chief symptom, bleeding, when the bowels are evacuated. From this symptom the name is derived. Slight internal piles may exist for years and only produce local itching and heat. Large internal piles are almost always protruded during a passage, but at first they are easily replaced. Later on, standing or walking may cause them to protrude. When they are congested, and protrude, they appear as dark, purple, soft, vascular tumors. The amount of blood lost in internal hæmorrhoids varies from two drachms to a quart. In the latter case there is marked exhaustion and anæmia."—Loomis.

TREATMENT: Prohibit the use of cathartic medicines and if the bowels are constipated, administer the following:

Fl. Ext. of Nux Vomica,	2½ drachms,
Fl. Ext. of Belladonna,	48 drops,
Fl. Ext. of Cascara Sagrada,	2 ounces,
Aromatic Elixir, sufficient to make,	6 ounces.

Mix and give a teaspoonful before each regular meal. If it produces more than two actions from the bowels, during each twenty-four hours, decrease the dose.

The following will sometimes afford marked relief:

Fl. Ext. of Witch Hazel,.....4 drachms,

Warm Water, sufficient to make,....4 ounces.

Mix and inject into the rectum after each action from the bowels, or:

Tannin,.....80 grains,

Warm Water,.....4 ounces.

Mix and use as the preceding prescription.

When the tumors are inflamed, bathe them frequently with cold water, or apply hot poultices to them and also use the following:

Extract of Belladonna,.....1 drachm,

Extract of Stramonium,.....1 drachm,

Sugar of Lead,.....10 grains,

Vaseline,.....1 ounce.

Mix and apply directly to the tumors every three or four hours, or:

Extract of Belladonna,.....1 drachm,

Extract of Stramonium,.....1 drachm,

Tannin,.....20 grains,

Iodoform,.....1 drachm,

Vaseline,.....1 ounce.

Mix and apply to the parts every four hours, or:

Extract of Belladonna,.....1 drachm,

Extract of Stramonium,.....1 drachm,

Iodoform,.....1 drachm,

Hydrochlorate of Cocaine,.....20 grains,
Sulphate of Morphine,.....10 grains,
Vaseline,.....1 ounce.

Mix and apply to the parts every four or five hours. Where the tumors are very sensitive and painful this last prescription will be found to be more satisfactory than the preceding ones.

There are various methods of treating hæmorrhoids with a view of making a permanent cure, but as the unprofessional could not use any of them, the subject is dismissed without further comment and the reader, for further treatment, is referred to a competent surgeon.

ANAL FISSURE.

FISSURE OF THE ANUS.

This is a small fissure, or crack in the mucous membrane near the verge of the anus, resembling the fissure seen in working men's hands during cold weather; characterized by burning, aching, throbbing pain when at stool and finally violent contraction of the sphincter muscles of the part and debility.

SYMPTOMS: The first symptom that attracts attention is burning or smarting at some particular part of the anus, especially when at stool. As the disease advances, the pain becomes more severe and is aching and throbbing in character. Finally there are violent contractions of the sphincter muscles of the part during, and for some time after, a stool. The discharges, on account of these contractions, are ribbon-shaped. They are also frequently streaked with blood, pus and mucus. Finally

the pain becomes almost unbearable, when, the patient is usually greatly debilitated.

TREATMENT: Local applications, without an operation, in the treatment of anal fissure, are worthless.

Several operations are recommended, the most simple of which is the forcible dilatation of the sphincter muscle. This may be accomplished by introducing both thumbs into the anus, then, bending them at right angles and quickly and forcibly withdrawing them while thus bent.

This accomplished, the following ointment should be used:

Iodoform,..... I drachm,

Vaseline,..... I ounce.

Mix and apply to the part three times a day. The patient should remain in bed until the soreness subsides.

Previous to the operation the bowels should be regulated with Cascara Sagrada and its use should be continued until the patient has fully recovered.

The diet should be light, consisting of soups, milk, teas, etc.

Where patients are greatly debilitated the following tonic should be given:

Fl. Ext. of Nux Vomica,..... 3 drachms,

Fl. Ext. of Hydrastis Can.,..... I ounce,

Fl. Ext. of Gentian,..... 3 ounces,

Aromatic Elixir, sufficient to make,.. 6 ounces.

Mix and give a teaspoonful before each regular meal.

PROLAPSUS ANI.

PROTRUSION OF THE RECTUM.

Prolapsus ani, or protrusion of the rectum, is a partial descent of the bowel without the anus. The size of the protruded bowel varies from the mere appearance of the intestine at the anus to that of a hen's egg or even larger.

The most common causes of it are relaxation of the parts, constipation, diarrhœa, hæmorrhoids and straining when at stool. It may occur at any age, but children and elderly persons are more subject to it than others.

TREATMENT: The bowel should be returned to its proper place at once. This may be accomplished by anointing an old, soft cloth with Vaseline, or common lard and applying it over the anus, then, making firm but gentle pressure with the finger-tips and thumbs. The performance may be greatly facilitated by placing the patient on the knees with the head resting on a pillow.

After the bowel is replaced, a pad and a "T" bandage should be applied in order to retain it in place.

The injection of equal parts of the Fl. Ext. of *Pinus Canadensis* and water two or three times a day is very beneficial in these cases. The following is also useful

Tannin,.....	80 grains,
Water,.....	4 ounces.

Mix and inject into the bowel three times a day.

The action of the bowels must be carefully regulated and the patient instructed to avoid straining when at stool.

The diet should be nutritious and easily digested.

FISTULA IN ANO.

FISTULA OF THE ANUS.

Fistula in ano is an unnatural pipe or canal, in the region of the anus, in which there is no disposition to heal. When the opening leads from the external parts into the bowel, it is said to be a complete fistula; when the opening or pipe does not communicate with the intestine, it is said to be an external, incomplete or blind fistula; and when the opening is in the bowel and not communicating with the external parts, it is said to be an internal, incomplete, or blind fistula.

The usual causes of it, are some form of mechanical pressure, or an impediment to the free discharge of the fæces. It may follow an attack of periproctitis. Scrofulous or tuberculous persons are more subject to it than others, and men are more subject to it than women.

SYMPTOMS: The disease usually makes its appearance with an ordinary abscess in the region of the anus. This is sometimes accompanied by high fever, quickened pulse, thirst, etc.

In some cases the pain and swelling are very slight, so much so that very little attention is attracted to it until the discharge of pus occurs, which may be from only one opening or from several. One important point in the diagnosis of fistula is that the discharge has the odor of fæces.

After the opening or openings are once established they show no disposition to heal without surgical aid.

The disease within itself is not dangerous to life, but it is not infrequently associated with a constitutional disease that may terminate in death.

TREATMENT: Every abscess in the region of the anus should be looked upon with suspicion and receive prompt treatment. They should be freely incised and their cavities thoroughly cleansed with Peroxide of Hydrogen, after which, a Solution of Carbolic Acid or Tr. of Iodine should be injected into them.

There are a variety of plans recommended for the radical cure of fistula, the most reliable of which is the free use of the surgeon's knife.

HERNIA.

RUPTURE.

Hernia is a protrusion of some organ from the cavity where it belongs, as the brain, lungs, etc., but it is generally understood to be a protrusion of an intestine from the cavity of the abdomen, and it is in this sense that the word is here used.

Hernia is said to be reducible when the protruding intestine can be returned into the cavity of the abdomen by manipulation; and it is said to be irriducible when it cannot be returned, on account of adhesions, by this method.

Hernia is said to be strangulated when there is a constriction at some point—usually the place of exit—which interferes with the circulation of blood and the passage of the contents of the bowels through the protruded knuckle of intestine. A partial illustration of the con-

dition that results under such circumstances may be seen by tying a cord rather tightly around a finger and allowing it to remain for some time.

The principal varieties of hernia are inguinal, femoral, and umbilical.

In inguinal hernia the intestine protrudes through what is known as the inguinal canal. This canal is about an inch and a half in length, extending from the internal abdominal ring above, downward, inward, and forward, to the external abdominal ring. In the male it transmits the spermatic cord and in the female the round ligament. In this form of hernia the intestine usually descends into the scrotum in the male and into the labium in the female.

In femoral hernia the intestine passes out of the abdominal cavity through the crural ring beneath Poupart's ligament. This form of hernia is more common in women than in men.

In umbilical hernia the intestine passes out of the abdominal cavity through the umbilical ring, and is usually present at birth, though, it may make its appearance later in life.

Hernia may be caused by violent crying, sneezing, or coughing, especially in children before a proper contraction of the abdominal walls have occurred around the remains of the umbilical cord. Anything that occasions general or local muscular debility may be the predisposing cause, such as dropsy, pregnancy, etc. The tendency to it seems to be hereditary with some persons. Strain-

ing when at stool, lifting heavy weights or other violent exercise are the most common exciting cause.

SYMPTOMS: In most cases the patient while straining at stool or during some kind of violent exercise, experiences a sharp pain, which is soon followed by the appearance of a soft elastic tumor in the region of the groin, or, in some cases in the scrotum. In rare instances, the swelling, which is gradual, is the first symptom that attracts attention. The tumor is somewhat tender, its size varying in different cases. In some, it is exceedingly large, while in others, it is small.

Where the hernia consists of a protrusion of one or more loops of the intestine, there may be more or less interference with the function of the bowel. Where this is the condition there is usually more or less colic, vomiting and constipation.

There are certain signs by which hernial tumors may be known; it becomes smaller when the patient assumes the recumbent position and larger when standing erect. Frequently the tumor disappears entirely during the night. A distinct impulse is imparted to the hand, when held on the tumor while the patient coughs.

Scrotal hernia may sometimes be mistaken for hydrocele, but this can usually be obviated by taking the patient into a dark room and holding the scrotum between the observer and a bright light. If it is hydrocele, there will be more or less translucency, which is absent in scrotal hernia.

In strangulated hernia the first symptoms are soreness in the region of the hernial tumor, which is usually accompanied by colicky pains and a feeling of tightness, generally attended by an accumulation of gas and distention of the abdomen. There is also a constant desire to evacuate the bowels, but the patient's efforts avail nothing. Vomiting soon occurs; the vomited material first consisting of the ordinary contents of the stomach, but afterwards of the contents of the bowels which has a characteristic fæcal odor.

The patient soon becomes greatly prostrated; the pulse quick and feeble; the skin pale; the extremities cold; and the patient restless and exhibiting great anxiety. If relief is not obtained, mortification of the protruded knuckle of intestine ensues; there is hiccough; the patient becomes easier and flatters himself by believing that he is better; but a condition of collapse ensues, soon terminating in death.

TREATMENT: Return the protruding intestine into the abdominal cavity at once. This may be more easily accomplished by placing the patient in the recumbent position. An appropriate truss should be procured and applied, never removing it except to wash the parts, when, the patient should be in a horizontal position.

In order to obtain a truss that is applicable to the case consult a competent surgeon.

By strictly observing the foregoing instructions a permanent cure is sometimes effected in young subjects.

Umbilical hernia, in infants, may usually be permanently cured by the constant wearing of a suitable truss. It is bad policy to experiment with cheap substitutes, as a bullet or a button in a bandage.

A truss should never be applied to a irreducible hernia, but when the tumor is large a suspensory apparatus should be worn. An irreducible hernia may become strangulated. In such cases the constriction must be overcome by an operation, but the adhesions should not be broken as there is great danger of wounding the intestine when this is undertaken.

Strangulated hernia may usually be relieved by the proper manipulation or taxis while the patient is thoroughly under the influence of Chloroform or Ether. Should this method fail, no time is to be lost in performing an operation for the purpose of relieving the knuckles of strangulated intestine, though no one, under any circumstances, but a competent surgeon should undertake the operation.

Surgeons operate with the view of making a permanent cure of hernia, but where the intestine can be kept in place with a truss the operation is hardly justifiable.

The injection method of treating hernia is still attracting some attention and numerous permanent cures are reported by its use. It consists of the injection of an irritant astringent fluid into the canal through which the intestine passes. There is no reason why this method should not be comparatively safe.

ILEUS.

INTESTINAL OBSTRUCTION.

Ileus or intestinal obstruction is a gradual or sudden closure of some part of the intestinal canal; characterized by deep-seated pain, nausea, stercoraceous vomiting and obstinate constipation, followed sooner or later by collapse.

The numerous causes of it are as follows:

1. "Accumulations within the bowel, of hardened fæces, or foreign bodies."

2. "Strictures, the result of cancer, ulceration, or cicatrices."

3. "Pressure against the bowel, from peritoneal adhesions, tumors, and abnormal growths."

4. "Strangulations, due to the numerous forms of hernia."

5. "Invagination or intussusception, the most common."

6. "Twisting, volvulus or rotations of the bowels."

"Invagination is the only form calling for special description. It is usually caused by the lower portion of the ilium slipping down into the cæcum, as the finger of a glove might be invaginated, causing thus an actual mechanical obstruction. This is produced by a spasm of the ilium, whereby its calibre is greatly diminished, thus permitting its descent into the lower bowel. Resulting from this occlusion or compression, are congestion, inflammation, with secondary constitutional reaction and death, or more rarely the invaginated bowel sloughs off

and is voided by stool, union taking place at its site and recovery following.”—Hughes.

SYMPTOMS: Intestinal obstruction usually commences with constipation attended by soreness, colicky pains and distention of the abdomen. These symptoms are soon followed by nausea and vomiting; the vomited matter first consisting of the ordinary contents of the stomach, mixed with more or less bile, and, afterwards, of faecal matter, especially where the obstruction is low down. Where it is high up there is generally hiccough with suppression of urine.

In some cases, especially where the obstruction is the result of invagination or intussusception, there are small stools, consisting principally of blood, mucus and pus.

As the disease advances the pulse becomes weak, sometimes irregular; the eyes sunken; the skin cold and covered with clammy perspiration.

This condition lasts a variable length of time, though where relief is not obtained death usually closes the scene within ten days, frequently less time.

TREATMENT: As soon as the nature of the attack is discovered, all cathartics must be discontinued and from the $\frac{1}{8}$ to a $\frac{1}{4}$ of a grain of the Sulphate of Morphine given in order to control the pain, repeating the dose as the urgency of the case demands, using care, however, not to introduce a sufficient amount of the drug into the system at one time to act as a poison.

The nausea and vomiting must be relieved as much as possible, with Creosote Compound Tablets, Subni-

trate of Bismuth, Mint, Carbo Ligni, etc. See Irritation of the Stomach.

In order to overcome the obstruction, large injections of warm soap-suds should be used occasionally. Should these fail to give the desired relief, the bowel may be distended with air by means of an ordinary syringe. This may be accomplished by allowing a small amount of water to enter the syringe for the purpose of causing the valves of the syringe to work properly. The writer succeeded very nicely in relieving a patient who was suffering with intestinal obstruction, which he believed resulted from intussusception or invagination, by this method.

Where the obstruction is the result of hardened or impacted fæces in the rectum, it may be removed with a spoon-handle or other such article.

In some cases surgical interference offers the only hope of relief, therefore, when the foregoing means fail a competent surgeon should be consulted at once.

INTESTINAL PARASITES.

WORMS.

There are three varieties of these that are quite common; the tape-worm, the round worm and the thread or pin-worm.

TÆNIA.

TAPE-WORM.

“There are three varieties of tape-worms commonly met with in man, and they are introduced into the intestines by eating imperfectly cooked pork, beef and fish. These worms are flat, made up of little links or joints,

and are usually of immense length. They are most frequently met with in adults though they are sometimes found in children.

“Sometimes the first evidence of the presence of a tape-worm is the appearance of segments of it in the stools and with nervous persons this knowledge causes great anxiety and worry. Generally, however, there is a feeling of lassitude, colicky pains in different parts of the abdomen, itching of the nose and anus, palpitation of the heart and occasional faintness. The digestion is deranged, the appetite being generally inordinate without satisfying the hunger while emaciation is usually present, the special senses are impaired, the breath has a peculiarly disagreeable odor, wakefulness is persistent, and there are occasional attacks of bleeding from the nose.”

“In nervous persons, sometimes paroxysms or spasms of various kinds occur. Cramps and pains in the extremities, St. Vitus’ dance, hysteria, and even spasms, resembling epilepsy, may be developed.”

“While the presence of a tape-worm may be suspected, the segments in the passages from the bowels give us the only positive evidence of its presence.”—Gunn.

TREATMENT: The evening before the remedy for the expulsion of the worm is to be given in the morning, give a full dose of Salts and if it does not act freely on the bowels repeat the dose. Allow the patient to eat no supper and administer the following, on an empty stomach early next morning:

Tannate of Pelletierine,.....5 grains,
 Oleoresin of Male Fern,.....4 drops,
 Chloroform,.....20 drops,
 Syrup of Gum Arabic,.....1 ounce.

Mix and give at one dose requiring the patient to drink a glass of sweet milk immediately afterwards. In an hour and a half or two hours give a full dose of Salts. Keep a vessel of warm water handy and when the patient gets up to stool require him to sit in the water. This prevents the worm's detecting the difference in its surroundings. Do not pull on the worm or touch it with the hands. If directions are carefully followed you will rarely ever fail to be successful.

The common Pumpkin Seed (Pepo) has been used with marked success in these cases. They may be prepared by depriving 2 ounces of the seed of their capsules, then, beating them to a pulp, adding sugar and water, when, they may be administered at one dose. In two hours administer a full dose of Oil. Use a vessel of warm water as previously directed. Prepare the system as previously directed.

ASCARIS LUMBRICOIDES.

LARGE ROUND WORMS.

This is one of the most common varieties of worms, and is usually met with in children from five to ten years of age, however, adults are by no means exempt from them. They are developed in the intestines after the entrance of the eggs, which are introduced by means of food and drink.

Their form is cylindrical, rather pointed at the extremities; varying in length from four to twelve inches; and about the thickness of an ordinary goose-quill, and greatly resembling a large earth-worm. They are to some extent translucent and of a yellowish or reddish color. They inhabit, principally, the small intestines, though, they may and frequently do migrate to other parts.

SYMPTOMS: A variety of symptoms have been enumerated which are claimed to indicate the presence of worms, such as bloating of the abdomen, softness or flabbiness of the muscles, itching of the nose and anus, swelling of the upper lip, the appearance of a white line around the mouth, grinding of the teeth and restlessness during sleep, bad breath, irregular appetite, and the presence of worms in the stools. Any or all of these symptoms may occur without the presence of worms, and worms may be present with but few of these symptoms. It is impossible to say, even when they are present in the fæces, but that all have been discharged.

TREATMENT: One of our most efficient remedies for the removal of large round worms is Santonine. It should be given with sugar thus:

Santonine,.....	4 grains,
Sugar,.....	1 teaspoonful.

Mix and divide into two powders. Give one at bedtime, the other an hour before breakfast and in two or three hours give a full dose of Oil.

The following is also an excellent remedy in these cases:

Oil of Wormseed,.....2 drachms,
 Oil of Tansy,..... $\frac{1}{2}$ drachm,
 Spirits of Turpentine,.....1 drachm,
 Castor Oil,.....1 ounce,
 Olive Oil, sufficient to make,....6 ounces.

Mix and give from ten drops to a teaspoonful, owing to the age of the patient, three times a day an hour before meals.

OXYURIS VERMICULARIS.

THREAD OR PIN-WORMS.

This variety of worms takes its name from its resemblance to an ordinary piece of thread. It measures from an eighth to a half-inch in length. This, similar to the preceding variety, is thought to gain entrance into the intestines by mean of the food and drink. They are usually met with in children, though, all ages are subject to them.

These worms inhabit the rectum, and not infrequently, in females, migrate to the vagina and develop there in great numbers.

SYMPTOMS: These are intense itching and burning of the anus with a desire to go to stool, the discharge frequently containing mucus, sometimes streaked with blood.

In females these worms migrate to the vagina, when there is intolerable itching of the part.

TREATMENT: In addition to the treatment recommended for the large round worms use any one of the following prescriptions:

Quassia Chips,..... 1 ounce,

Warm Water,..... 1 pint.

Mix and after keeping warm for a half a day strain and use as an injection after cleansing the bowel thoroughly with soap-suds, or:

Carbolic Acid,..... 1 drachm,

Water, 1 pint.

Mix and use two or three times a day as an injection, or:

Common Salt,.. 1 ounce,

Water,..... 1 pint.

Mix and use as an injection two or three times a day.

Either of the foregoing prescriptions is efficient, but the Quassia is probably the best.

TRICHINA SPIRALIS.

This is a peculiar parasite and it sometimes infests the human body in great numbers. It was discovered by Owen, in 1835. They are developed in the alimentary canal, but perforate these tissues and migrate into the muscles, there becoming encysted. They are introduced into the system by eating the raw or imperfectly cooked flesh of the infected hog.

Trichinæ are sometimes found in pork in almost innumerable numbers. Dr. Sutton, of Indiana, claims to have found eighty thousand of them in a piece of pork the size of a cubic inch. Their detection is impossible without the aid of a microscope.

SYMPTOMS: These are nausea, vomiting and a watery diarrhœa followed by a typhoid-like type of fever, red,

swollen face, profuse sweats, with muscular soreness and tenderness, increased by motion. If only a few parasites have been ingested, recovery may soon take place, but where the number was great the patient sinks, day by day, until death closes the scene.

TREATMENT: The trouble may be entirely avoided by eating no raw or imperfectly cooked pork or bacon. Emetics and cathartics may be freely administered for three or four days after eating the infected meat, with the hope of removing them from the stomach and bowels. After this, the case must be treated on general principles, however, the treatment recommended for typhoid fever would probably be suitable in this condition.

ACUTE PERITONITIS.

ACUTE INFLAMMATION OF THE PERITONEUM.

This is an acute inflammation of the peritoneum, or membrane lining the cavity of the abdomen; characterized by fever, intense pain, tenderness, tympanites, constipation, vomiting and great prostration.

When the inflammation involves only a part of the peritoneum it is called local peritonitis and when it involves the entire membrane it is known as general peritonitis.

Its most common causes are wounds, especially penetrating, of the abdomen, inflammation or perforation of the stomach, intestines, gall or urinary bladder, vermiform appendix or surrounding parts, hernia, erysipelas, inflammation of the womb, septicæmia, pyæmia; the

entrance of pus, fæcal matter, etc., into the peritoneal cavity from any cause, and it not infrequently follows confinement, in a violent form. It is through the conditions just mentioned (and others) that micro-organisms gain entrance into the peritoneal cavity and produce the disease. There are a variety of these micro-organisms that are thought to be capable of inducing peritonitis, as: The tubercle bacillus, the staphylococcus pyogenes aureus, the bacterium commune, which is always present in the intestines; the streptococcus pyogenes, the pneumococcus, anthrax bacillus, etc., etc.

SYMPTOMS: In some cases an attack commences with a well-marked chill, followed by fever, quickened pulse, intense pain of a cutting or boring character, distention and extreme tenderness of the abdomen.

In other cases, especially those resulting from an inflammation of other parts, or perforation of the stomach, intestines, or other organs, the attack commences with severe local pain, which gradually extends over the entire abdomen. In recently delivered females it is not infrequently mistaken for after-pains.

The bowels are usually obstinately constipated, however, in some cases diarrhœa is present. Nausea, vomiting and hiccough, are usually present. The abdomen becomes greatly distended; and the patient lies on the back with the legs drawn up in order to lessen the tension of the abdominal muscles. Tenderness of the region of the abdomen is now extreme and is greatly aggravated by coughing, movements, or pressure.

These symptoms continue for six or eight days when effusion occurs. The pain and soreness now gradually subside and a tedious convalescence ensues; or the symptoms are aggravated; the pulse becoming weak and thready; the surface cold and covered with a clammy perspiration and there is collapse. The expression is now anxious; the eyes sunken; the features pinched; the upper lip drawn; the pulse imperceptible at the wrists and death shortly closes the scene.

TREATMENT: Where there is fever with a full strong pulse, and no irritation of the stomach, the treatment should be commenced by the administration of Veratrum, and if there is flushed face, with bright eyes and contracted pupils, add Gelsemium, thus:

Tr. of Veratrum Viride,.....18 drops,
Fl. Ext. of Gelsemium,.....27 drops,
Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while there is fever. If the stomach is irritated give Aconite instead of the Veratrum, adding the Gelsemium if it is indicated; or if the patient is drowsy, the pupils being too large, give Belladonna instead of the Gelsemium, thus:

Tr. of Aconite Root,.....18 drops,
Fl. Ext. of Belladonna,.....6 drops,
Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half or two hours while there is fever.

Where the pulse is weak or irregular give the following instead of the Aconite or Veratrum:

Fl. Ext. of Digitalis,.....12 drops,
Fl. Ext. of Cactus Grand.,.....24 drops,
Water,12 teaspoonfuls.

Mix and give a teaspoonful every two hours while the pulse is weak.

Keep the bowels open with Salts, in half-tablespoonful doses, every two or three hours as is required, aided by enemas of warm soap-suds.

For the purpose of controlling the pain give $\frac{1}{4}$ of a grain of the Sulphate of Morphine, hypodermically, every two or three hours as is required.

Hot poultices should be applied to the abdomen at short intervals. Instead of these, clothes wrung out of hot Turpentine-water may be used, frequently changing them.

If the tongue is broad, pallid, and coated with a filthy, pasty coat, give 15 or 20 grains of the Sulphite of Soda every three or four hours.

If the urine is scanty give 15 or 20 drops of the Acetate of Potash every three or four hours.

If the stomach is irritable small lumps of ice may be given occasionally. Where this fails to relieve the stomach a Tablet of Creosote Compound may be given every hour. See Irritation of Stomach.

Where there is any suspicion of a perforation of the stomach, intestines, gall or urinary bladder, call a competent surgeon at once as the case is exceedingly dan-

gerous. A laparotomy may not save the patient but it offers about the only hope.

As peritonitis is one of our most dangerous diseases it is not advisable for the unprofessional reader to attempt to treat it in any of its forms.

The diet should consist of soups, teas, egg-white, etc.

CHRONIC PERITONITIS.

CHRONIC INFLAMMATION OF THE PERITONEUM.

Chronic peritonitis is a chronic inflammation of the peritoneum or lining membrane of the abdomen; characterized by pain, tenderness, emaciation and sometimes fever, followed by an effusion of liquid into the peritoneal cavity. It may occur as a sequel to the acute form of the disease, but it is more commonly met with as a result of cancer, or tuberculosis of the bowels, Bright's disease of the kidneys or sclerosis of the liver.

The disease is most frequently seen in children, but all ages are subject to it.

SYMPTOMS: These are irregular chills, and fevers followed by sweats with pain, tenderness, and more or less dropsical swelling of the abdomen, especially where it is a result of the acute form of the disease. Constipation alternated with diarrhœa and followed, sooner or later, by emaciation and debility, is characteristic. "Usually the lower portion of the abdomen gives a dull note on percussion, from the presence of fluid, or scattered points of dullness, showing the presence of encysted fluid." Almost, if not quite all, of these cases finally terminate fatally.

TREATMENT: The following is beneficial in these cases.

Iodide of Potash,.....1 ounce,
Fl. Ext. of Apocynum Can.,..... 3 drachms,
Compound Syr. of Stillingia, suffi-
cient to make,.....6 ounces.

Mix and give a teaspoonful three times a day after meals.

Counter-irritation is also an important remedy in these cases, and nothing answers a better purpose than the Compound Tar Plaster. It should be applied to the abdomen and worn as long as the patient can bear it, when, it should be removed until the parts have healed to some extent and then, applied again and continued in this manner for a long time.

Where the patient is debilitated give stimulants, a nutritious diet and the following tonic:

Fl. Ext. of Nux Vomica,.....3 drachms,
Fl. Ext. Hydrastis Can.,.....1 ounce,
Fl. Ext. of Gentian,.....3 ounces,
Aromatic Elixir, sufficient to make,.6 ounces.

Mix and give a teaspoonful three times a day before meals.

CONGESTION OF THE LIVER.

“BILIOUSNESS.”

This is an abnormal fullness of the blood-vessels of the liver; characterized by loss of appetite, fullness and soreness in the region of the liver, followed by slight jaundice.

The most common causes of it are exposure to excessive heat, constipation of the bowels; the immoderate use of spirituous liquors, overindulgence at the table, malaria, and diseases of the heart and lungs.

SYMPTOMS: These are loss of appetite; a yellowish coated tongue; sometimes nausea and vomiting; aching of the limbs; headache, evening fevers, scanty high-colored urine, and a feeling of fullness and soreness in the liver, followed by slight jaundice.

TREATMENT: Where an attack is caused by a heart or lung-disease it may be relieved by removing its cause.

Where it results from other causes, the treatment may be commenced by the administration of Oil, Salts or a Seidlitz Powder. If there is a yellowish coating on the tongue, the following should be given:

Calomel,	1 grain,
Bicarbonate of Soda,	10 grains,
Powd. Ipecac,	1 grain.

Mix, divide into five powders and give one every hour. If they fail to act mildly on the bowels follow them with Oil, Salts or a Seidlitz Powder.

Nausea and vomiting when present may usually be relieved by counter-irritation over the region of the stomach and the administration of the Creosote Compound Tablet every hour. See Irritation of the Stomach.

The pain is sometimes quite severe. In such cases hot applications may be applied over the region of the liver. Should these fail to afford relief $\frac{1}{4}$ of a grain of the Sulphate of Morphine may be given, preferably, hypodermically.

When fever is present it should be controlled with sedatives administered according to indications. If it is high, Acetanilide may also be given. If the fever is periodic give Quinine as is recommended for intermittent fever.

If there is scantiness of urine give the following:

Acetate of Potash,..... $\frac{1}{2}$ ounce,

Water, sufficient to make,.....2 ounces.

Mix and give a teaspoonful, in a sup of water every three or four hours until the desired effects are obtained.

Where there is yellowness of the skin and eyes (jaundice), give the following:

Fl. Ext. of Nux Vomica,.....3 drachms,

Fl. Ext. of Chionanthus Virg.,.....3 ounces,

Fl. Ext. of Hydrastis Can.,.....1 ounce,

Aromatic Elixir, sufficient to make, .6 ounces.

Mix and give a teaspoonful three times a day before meals.

In persons, who are predisposed to congestion of the liver, the diet and habits must be well regulated, and if there is constipation of the bowels it must receive appropriate treatment.

HEPATITIS.

INFLAMMATION OF THE LIVER.

Hepatitis is an inflammation of a part, rarely, if ever, of the entire substance of the liver; characterized by fever, pain and tenderness in the region of this organ and in some cases the formation of an abscess.

It may result from a variety of causes, the most common of which, are exposure to cold, blows or wounds in the region of the liver; high-living, intemperance, intense summer heat, malaria, ulcers of the stomach; and the absorption of putrid material by the portal radicles in dysentery.

SYMPTOMS: An attack is usually ushered in with a chill or rigor, followed by fever, nausea, vomiting, pain and tenderness in the region of the liver, varying in intensity, being more severe when the peritoneal covering of the organ is involved. Not infrequently the pain extends to the right shoulder. As the disease advances, the skin becomes hot and dry; the pulse full and quick; the urine scanty and high-colored; the bowels constipated; and the tongue usually coated with a yellowish fur.

In some cases, especially where that portion of the liver next to the diaphragm is involved, the lung becomes irritated, producing more or less cough and sometimes difficult breathing.

During the first few days of an attack, the fever is remittent, the remissions usually occurring of a morning, though, they are sometimes not well marked.

The inflammation continues from eight to twelve days and terminates in recovery or the formation of an abscess, which may, and not infrequently does, terminate in death. When the inflammation terminates in the formation of an abscess, the pain becomes less severe and of a throbbing character; there are chills or rigors at irregular intervals, followed by fevers and profuse sweats.

The pus may be discharged into the stomach, the intestines, the peritoneal cavity, through the pleura into the lungs, or externally.

TREATMENT: Control the fever. Sedatives administered according to indications will usually do this very nicely, however, where the fever runs high, Acetanilide should also be given.

As a sedative to the liver Calomel is probably our best remedy. It may be given as follows:

Calomel,	1 grain,
Powd. Ipecac,	1 grain,
Bicarbonate of Soda,	10 grains.

Mix, divide into five powders and give one every hour. This may be repeated each day during the attack. Should the Calomel fail to keep the bowels open, Oil, Salts or Seidlitz Powders should be used for this purpose as is required.

Nausea and vomiting, when present, may usually be controlled by means of counter-irritation over the stomach in the form of a Mustard-Plaster and the administration of a Creosote Compound Tablet every hour.

For the relief of pain hot poultices or hot salt may be applied to the painful part.

If the urine is scanty, give the following:

Acetate of Potash,	$\frac{1}{2}$ ounce,
Water, sufficient to make,	2 ounces.

Mix and give a teaspoonful, in a sup of water, every three or four hours until the desired effects are obtained.

In malarial districts, during the remissions, which usually occur of a morning, 5 grains of the Sulphate of Quinine should be given every two hours.

Where the inflammation terminates in the formation of an abscess, the pus must be removed with an instrument called an aspirator, or by a free incision and the system supported with the following:

Fl. Ext. of Nux Vomica,.....3 drachms,

Fl. Ext. of Hydrastis Can.,1 ounce,

Fl. Ext. of Gentian,.....3 ounces,

Aromatic Elixir, sufficient to make,.6 ounces.

Mix and give a teaspoonful three times a day before meals.

CIRRHOSIS OF THE LIVER.

GIN-DRINKER'S LIVER.

This is a chronic inflammation of the intervening connective tissue of the liver, resulting in hardening and atrophy of this organ; characterized by emaciation, slight jaundice, gastro-intestinal catarrh, and dropsy of the abdomen.

It is caused by syphilis, also the prolonged use of beer and alcoholic stimulants.

SYMPTOMS: The disease always terminates, sooner or later, in death, yet no definite symptoms occur until abdominal dropsy makes its appearance, however, attacks of persistent vomiting and diarrhoea, with slight jaundice, are suspicious in drinking men.

As the disease advances, there is indigestion; slight jaundice; increasing emaciation; enlargement of the superficial abdominal veins; hemorrhage from the stomach

and bowels; great distention of the abdomen and more or less difficulty in breathing.

In some cases there is dropsical swelling of the feet and legs, but this generally results from some coincident heart or kidney-disease.

TREATMENT: Regulate the diet, prohibiting fatty and saccharine articles; and also spirituous liquors. If digestion is feeble, give the following:

Fl. Ext. of *Nux Vomica*,.....3 drachms,

Fl. Ext. of *Hydrastis Can.*,.....1 ounce,

Fl. Ext. of *Gentian*,.....3 ounces,

Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful three times a day before meals. When jaundice is present, from 20 to 30 drops of the Fl. Ext. of *Chionanthus Virginica* should be added to each dose of the foregoing.

The Phosphate of Soda should be given in from $\frac{1}{2}$ to 1-drachm doses after meals. The Iodide of Potash, in 10-grain doses, three times a day, is thought to be beneficial. Calomel is recommended, but we think without good reasons.

Where complications, such as constipation, dropsy, hemorrhage, heart, or kidney-disease, arise, appropriate treatment for their relief, as is recommended elsewhere in this work, should be adopted.

BILIARY CALCULI.

GALL-STONES; HEPATIC COLIC.

Gall-stones are concretions formed in the gall-bladder or biliary ducts, composed partly, or entirely, of the con-

stituents of the bile, and varying in size from a pin-head to a hen-egg. They may remain within the gall-bladder a long time, and yet produce no symptoms, which would lead to their recognition, until the passage of one or more of them is attempted, when an attack of what is known as hepatic colic ensues. Cancerous growths, or tumors, in the gall-bladder or liver; inflammation of the gall-bladder, constipation, tight-lacing, pregnancy or any trouble that interferes with the flow of bile, are thought to predispose to their development. It is a disease of middle life, however, they are met with in children and young persons. Women are more subject to them than men. Gilbert and Fouriner claim to have produced them experimentally by injecting micro-organisms into the gall-bladder of animals.

SYMPTOMS: An attack commences suddenly, when a stone passes from the gall-bladder into the cystic duct, with cutting, agonizing pains in the region of the gall-bladder and soon extending to the abdomen and right chest. They are of a remittent character and continue from one or two hours to several days, or until the stone is passed.

Nausea and vomiting are almost always present; the pulse is small and feeble; the skin cool and pale; the expression anxious, with, in some cases, chills, trembling, fainting, or convulsions. Jaundice usually makes its appearance during or after an attack. As soon as the stone reaches the duodenum, the pain ceases suddenly; the nausea, vomiting, soreness and jaundice soon subside

and the patient is convalescent, however considerably debilitated.

Where the stone becomes impacted there is ulcerative perforation with consequent peritonitis, the stone discharging into the intestine, stomach, or through the abdominal wall.

TREATMENT: The pain may be controlled with the Sulphate of Morphine in doses of $\frac{1}{4}$ grain, preferably hypodermically, every hour or so as the urgency of the case demands, being careful, however, not to introduce a sufficient quantity of it into the system at one time to act as a poison.

Instead of the Morphine, 20 to 30 drops of Chloroform, largely diluted with sweetened water, may be given every twenty or thirty minutes. When the pain is very excruciating the Chloroform may be used by inhalation, however, when used in this manner, it is necessary to exercise the greatest of care.

The Fl. Ext. of Gelsemium, in 10-drop doses every forty minutes until the pain is relieved, or until drooping of the eyelids or double vision is produced, is highly recommended in these cases for relieving the pain and sometimes gives excellent results.

The application of hot poultices, or clothes wrung out of hot water, removing them frequently, is very beneficial and their use should not be neglected.

The stones having passed into the intestine, which may be inferred by the cessation of pain for some time, a full dose of Oil, Salts or Seidlitz Powder, should be

given in order to obtain an action from the bowels, thus hastening the stone's removal as well as the discharge of the accumulated bile.

Where there is jaundice from 20 to 30 drops of the Fl. Ext. of *Chionanthus Virginica* should be given four times a day.

With a view of preventing a reformation of the stones Phosphate of Soda should be given three times a day in doses from $\frac{1}{2}$ to 1 drachm, regulating the dose, however, according to its effect on the bowels. In order to be successful its use should be continued for a long time.

Where the stone, or stones, in the gall-bladder are large, surgery offers the only hope of a cure.

ICTERUS.

JAUNDICE.

This is a condition in which there is an undue amount of bile in the system; characterized by itching and yellowness of the skin and eyes, with light or clay-colored stools and high-colored urine.

It is not, really, a disease within itself, but only a symptom of some morbid condition of the liver or gall-ducts.

The principal cause of jaundice is the non-removal of the bile from the blood by the liver, and some obstruction, such as the presence of gall-stones, tumors, or an inflammation of the gall-ducts, preventing the transit of bile after secretion, thus causing its re-absorption into the blood.

SYMPTOMS: Jaundice usually commences with a feeling of languor, loss of appetite, flatulency and constipation. As the disease advances, there is yellowness of the eyes, skin and nails, headache, itching of the skin; more or less pain and tenderness in the region of the liver; bitter taste in the mouth; and the tongue coated with a yellow fur. There is usually nausea and vomiting, high-colored urine and whitish or light-colored discharges from the bowels.

The pulse, in some cases, is unaffected, while in others it is quickened, especially in those cases where there is fever. When fever is present it is usually of a remittent type and may continue a week or more.

Yellowness of vision is common. This is caused by the humors of the eyes becoming tinted with bile.

The duration of an attack is extremely varied, terminating in some cases, within a few days, while in others it continues for months, however, this is exceedingly rare except in badly, or improperly treated cases.

TREATMENT: If fever is present control it with sedatives administered according to indications. If the fever is periodic administer Quinine as is recommended in remittent fever.

If the bowels are constipated administer Oil, Salts or a Seidlitz Powder; or if the tongue is coated with a yellowish coat, give the following:

Calomel,.....	1 grain,
Powd. Ipecac,.....	1 grain,
Bicarbonate of Soda,.....	10 grains.

Mix, divide into five powders and give one every hour. This prescription may be repeated every day for a few days.

As soon as the disease makes its appearance, when there is no fever, the following should be given:

Fl. Ext. of Nux Vomica,.....3 drachms,

Fl. Ext. of Hydrastic Can.,.....1 ounce,

Fl. Ext. of Chionanthus Virginica,.3 ounces,

Aromatic Elixir, sufficient to make,.6 ounces.

Mix and give a teaspoonful before each regular meal.

If the pain in the region of the liver is severe, hot poultices, hot salt, or clothes wrung out of hot water, may be applied.

If the urine is scanty give the following:

Acetate of Potash,..... $\frac{1}{2}$ ounce,

Water, sufficient to make,.....2 ounces.

Mix and give a teaspoonful every four hours until the desired effects are obtained.

In chronic cases, or where the affection comes on slowly, alteratives should be given, thus:

Iodide of Potash,.....1 ounce,

Compound Syr. of Stillingia, to make,...6 ounces.

Mix and give a teaspoonful three times a day after meals.

The continued use of counter-irritation, in the form of the Compound Tar Plaster, over the region of the liver, answers an excellent purpose in these cases. Should the means here recommended fail to effect a cure, no time should be lost in consulting a competent physician.

SPLENITIS.

INFLAMMATION OF THE SPLEEN.

Splenitis is an inflammation of the substance, and not infrequently the peritoneal covering of the spleen; characterized by fever, pain, tenderness and more or less swelling of this organ. It is a very rare disease, the writer, in a practice extending over more than twenty years, never having seen but three cases of it.

It may result from an obstruction of the circulation of the organ by a blood-clot in its vessels, or from violence, malaria, or the same causes that give rise to inflammation in other organs.

SYMPTOMS: An attack usually commences with a well-marked chill, followed by fever, thirst, an accelerated pulse; pain and tenderness in the left side in the region of the spleen. Where only the substance of the spleen is involved, the pain is dull, but where the peritoneal covering is involved, it is severe and cutting. The pain, in some cases, extends over the entire abdomen and sometimes into the left shoulder. A dry cough is present in a majority of cases, and this greatly aggravates the patient's suffering.

The bowels are constipated; the urine scanty and high-colored; the tongue is coated with a whitish or a yellowish fur; and in many cases there is nausea and vomiting. In some cases the affected side is enlarged on account of the swelling of the spleen, which may be felt through the abdominal walls.

The fever is usually, if not always, of a remittent type, however, as the disease advances it may become continuous.

Inflammation of the spleen usually terminates in a restoration of the organ to its normal condition, however, in some cases, especially severe ones, it may terminate in the formation of an abscess, which may be recognized by the pains becoming less severe and of a throbbing character.

TREATMENT: Control the fever with sedatives administered according to indications and if the fever is high and the pulse strong Acetanilide may also be given.

If there is a yellowish coating on the tongue give the following:

Calomel, 1 grain,
Powd. Ipecac, 1 grain,
Bicarbonate of Soda, 10 grains.

Mix, divide into five powders and give one every hour. Should they fail to act mildly on the bowels give Oil, Salts or a Seidlitz Powder. If preferred two Improved Compound Cathartic Pills may be used instead of the Calomel. If they are given, give one, wait four hours and give the other one.

Where the urine is scanty give 15 or 20 grains of the Acetate of Potash, or 20 or 30 drops of the Fl. Ext. of Buchu every four hours until the desired effects are obtained.

Nausea and vomiting, when present, may usually be controlled with counter-irritation, in the form of a

Mustard-Plaster, over the region of the stomach and hourly doses of Creosote Compound Tablets.

When pain is severe apply hot poultices, hot salt, or clothes wrung out of hot water, over the region of the spleen, frequently changing them.

If the fever is of a remittent type, give Quinine during the remissions, as is recommended for remittent fever.

If the fever assumes a continued type, treat it as such.

When the inflammation terminates in the formation of an abscess, the pus should be promptly removed by an incision or with an aspirator, however, no one but a competent surgeon should attempt this.

HYPERTROPHY OF THE SPLEEN.

ENLARGEMENT OF THE SPLEEN.

Hypertrophy of the spleen is an enlarged condition of this organ, commonly known as ague-cake. It is a result of, or attendant upon, sub-acute or chronic inflammation. The organ is sometimes enlarged to such an extent that it fills the entire cavity of the abdomen.

It may result from several causes, the most common of which is protracted cases of chronic malaria.

SYMPTOMS: These, with the exception of the enlargement of the organ, which may be distinctly felt through the abdominal walls, are obscure, however, there is usually a sense of uneasiness, weight or tension, and sometimes pain in the left side, with, in most cases, shortness of breath, more or less despondency, constipation, scanty urine and a whitish coating on the tongue.

In advanced stages of the disease the debility is extreme; there is loss of appetite, with hectic fever, night-sweats, diarrhoea, hemorrhage from the stomach, or dropsy, and if relief is not obtained death finally closes the scene, however, this termination is usually brought about by some intercurrent disease.

TREATMENT: See Chronic Intermittent.

THE PANCREAS.

This is a gland about six or seven inches long, situated behind the stomach and in front of the first lumbar vertebra. It secretes a fluid known as the pancreatic juice, which is emptied through a canal or duct into the duodenum just below the stomach. This fluid aids in the digestion of fats.

Diseases of this organ are very obscure, besides, we have no known remedy that acts specifically upon it, therefore, none of its diseases except inflammation will be noticed.

PANCREATITIS.

INFLAMMATION OF THE PANCREAS.

Pancreatitis is an inflammation of the substance of the pancreas; probably characterized by fever, a dull, deep-seated pain in the region of this organ, often shooting to the back and left shoulder.

The causes of it are very obscure, but it is thought that the excessive use of alcoholic liquors or blows over the organ may induce an attack, and it may follow certain forms of fever.

Men are more subject to it than women.

SYMPTOMS: These are obscure; however, there is probably a dull, deep-seated, colicky pain in the region of the pancreas, usually extending to the back and left shoulder. Fever, with a quickened or irregular pulse, intense thirst, more or less difficulty in breathing, constipation of the bowels, and vomiting of a thin, viscid fluid, often mixed with bile, are generally present.

The pain is greatly aggravated by firm pressure over the pancreas; and there is great anxiety, marked depression and symptoms of collapse from the commencement of the attack. An attack is usually fatal.

TREATMENT: We control an inflammation of the pancreas on precisely the same principles that inflammation of other organs is controlled, i. e., by controlling the circulation and temperature and obtaining free action from the excretory organs. The first may be accomplished very nicely by the use of sedatives according to indications and the latter by the use of cathartics and diuretics.

Nausea and vomiting, when present, may be controlled in this, as in other diseases.

PART VI.

DISEASES OF THE URINARY APPARATUS, INCLUDING DISEASES OF THE MALE ORGANS OF GENERATION, AND VENEREAL DISEASES.

THE URINARY APPARATUS.

This consists of the kidneys, ureters or canals that convey the urine from the kidneys to the bladder, and the bladder, and the urethra or canal through which the urine is discharged.

The urine is a slightly acid fluid of a light, amber color, excreted by the kidneys. The color deepens if the quantity voided be decreased, and vice versa. The amount of urine excreted by a healthy adult varies from forty to fifty ounces in twenty-four hours. It is decreased by free perspiration and increased by chilling the surface. Its normal specific gravity varies from 1.015 to 1.025; it is greater when the quantity of urine is decreased, and lower when it is increased.

By specific gravity is meant the weight compared with water, thus: If a given quantity weighs 1,000 grains, the same quantity of normal urine would weigh between 1.015 and 1.025 grains.

The urine is one of the most important excretions of the human body, as it is through it that a great deal of the waste material, that is no longer necessary for the support of animal life, is removed from the system. This material, when allowed to accumulate in the body, acts as a narcotic poison, and thus not infrequently produces death; hence, the importance of its removal.

RENAL HYPERÆMIA.

CONGESTION OF THE KIDNEYS.

This is an abnormal fullness of the blood vessels of the kidneys; characterized by pain and a frequent desire to urinate, the urine being scanty, high-colored, and sometimes contains blood or albumen.

There are two forms of congestion of the kidneys; the active and the passive. When the congestion is arterial it is active, and when venous it is passive.

The most common causes of active congestion are cold, injuries over the kidneys; irritating substances eliminated by the kidneys, as Chlorate of Potash, Turpentine, Cantharides, Copaiba, Carbolic Acid, etc.

The passive form is caused by some heart or lung-disease that obstructs the circulation, or pressure of the pregnant uterus.

SYMPTOMS: The symptoms of the active form are pain over the region of the kidneys, extending into the testicle and penis; a frequent desire to urinate, the urine being scanty and high-colored and not infrequently contains albumen or blood. Loss of appetite, headache, nausea and vomiting, with a feeling of discomfort, are

usually present. This condition, unless controlled by proper treatment, is very liable to terminate in inflammation of the kidneys.

The symptoms of the passive form are at first obscure, rarely attracting any attention until a dropsical condition, usually beginning in the feet and legs, is developed. In rare cases, however, there is persistent headache, more or less nausea and vomiting.

The urine, in these cases, is scanty and high-colored, and after standing for a few hours a sediment consisting of albumen is deposited on the bottom of the vessel containing it. The test usually relied on for detecting albumen in the urine, is to put a half-ounce of the suspected urine in a test-tube, or a clear vial, and then add 3 or 4 drops of Nitric Acid to it and hold the test-tube or vial over a spirit-lamp, or other lamp, until the urine boils. If albumin be present there is a whitish deposit, resembling, to some extent, the white of an egg.

TREATMENT: If possible ascertain the cause and remove it; put the patient to bed and administer a full dose of Salts or Seidlitz Powder; apply dry cups or hot poultices over the region of the kidneys; allow the patient to drink lemonade freely; and if there is irritation of the bladder give from 3 to 5-drop doses of the Fl. Ext. of Gelsemium every half-hour until three or four doses are taken. Should this fail to give relief hot poultices may be applied over the region of the bladder and to the perineum.

The passive form is relieved by removing its cause. If the heart or lungs are affected appropriate treatment should be adopted to overcome any wrong of these organs. If the feet and legs are swollen give 3 or 4 drops of the Fl. Ext. of Apocynum Cannabinum four times a day. Even where the disease is produced by pregnancy the Apocynum will usually relieve it.

ACUTE NEPHRITIS.

ACUTE INFLAMMATION OF THE KIDNEYS.

This is an acute inflammation of the substance of one or both kidneys; characterized by fever, deep-seated pain, retraction of the testicle of the affected side, numbness of the thigh of the same side, and scantiness of urine, with, in most cases, pain and difficulty in passing it.

The most common causes of it are a sudden chilling of the body; the excessive use of alcoholic liquors; the improper use of irritating diuretics; the presence of renal calculi, and blows over the region of the kidneys.

SYMPTOMS: An attack commences with a well-marked chill or rigor followed by fever and a severe pain in the region of the kidneys. In the course of forty-eight or seventy-two hours the fever becomes a marked feature of the disease. By the second day of the attack the pain extends into the testicle, causing retraction of this organ, and there is usually more or less numbness of the thigh of the affected side. The pain is greatly increased by straining at stool or in voiding the urine.

As the disease advances, the urine, which was but little changed at the beginning of the attack, becomes

scanty and of a dark-red color and is not infrequently streaked with blood. If both kidneys are involved, the urine becomes very scanty, sometimes, almost, if not quite, suppressed, when, there is a low, muttering delirium, or stupor and death, as a rule, soon terminates the scene. Obstinate constipation, nausea and vomiting, a harsh, dry skin and sleeplessness are generally present in these cases.

Where only one kidney is involved and the disease progresses until the eighth or tenth day without being controlled, the fever assumes a typhoid or continued type, when the tongue becomes dark, and sordes appear on the lips and teeth.

These attacks last a variable length of time and not infrequently terminate in death.

This, as well as any other inflammation, may also terminate in the formation of pus, which is indicated by irregular chills and fevers followed by profuse perspirations.

TREATMENT: Control the fever. If the pulse is full and strong give *Veratrum*, and where the face is flushed, the eyes bright and the pupils contracted, add *Gelsemium*, thus:

Tr. of <i>Veratrum Viride</i> ,.....	18 drops,
Fl. Ext. of <i>Gelsemium</i> ,.....	27 drops,
Water,.....	18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half or two hours while there is fever. If the fever is high, 5 grains of *Acetanilide* should also be given every three

or four hours. If the stomach is irritated give Aconite instead of the Veratrum, adding the Gelsemium, if it is indicated; or if the patient is drowsy, the pupils being too large, give Belladonna instead of the Gelsemium, thus:

Tr. of Aconite Root,.....18 drops,
Fl. Ext. of Belladonna,..... 6 drops,
Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half or two hours while there is fever.

If the pulse is weak or irregular give Digitalis and Cactus instead of the Veratrum or Aconite, adding the Belladonna, if indicated, thus:

Fl. Ext. of Digitalis,.....12 drops,
Fl. Ext. of Cactus Grand.,.....24 drops,
Fl. Ext. of Belladonna,..... 6 drops,
Water,.....12 teaspoonfuls.

Mix and give a teaspoonful every two hours while the pulse is weak or irregular.

Keep the bowels open from the beginning of the attack with Salts.

The action of the foregoing remedies may be aided by the employment of a hot sitz-bath, and at the same time placing the feet in a vessel of hot Mustard-Water, being careful, however, to see that the patient's body is not exposed to cold air. After the bath, put the patient to bed and apply hot poultices over the region of the kidneys, frequently changing them until relief is obtained.

Diuretics should not be given until the more acute symptoms have subsided, and, then, only those of a mild, unirritating character, such as the Fl. Ext. of Polytrichum, in 30-drop doses every three or four hours.

If suppuration occurs, support the strength and give from 1-10 to 1-8 of a grain of the Sulphide of Calcium every four hours.

If the fever assumes a continued or typhoid type treat it as such.

The diet in these cases must be light and unstimulating.

CHRONIC NEPHRITIS.

CHRONIC INFLAMMATION OF THE KIDNEYS.

This is a chronic inflammation of the substance of one or both kidneys; characterized by pain, weakness of the back, scanty, high-colored urine, emaciation and a peculiar appearance of the tongue.

It may result from the acute form of the disease, but it is more commonly induced by other causes, such as cold, injuries in the region of the kidneys; the excessive use of alcoholic liquors; or irritating diuretics administered in the treatment of other diseases.

SYMPTOMS: There are pain and soreness in the loins, worse at some times than at others, and is increased by active exercise. At first, there may be very little change in the urine, but as the disease progresses. it becomes scanty and high-colored and its discharge is usually attended by a sensation of more or less burning in the urethra.

In some cases the testicles are retracted; in others, there is recurring pain in them or the penis. The bowels are usually obstinately constipated, and more or less nausea and vomiting are usually present. The tongue is, as a rule, red and rather deeply fissured. The patient complains of weakness of the back.

These symptoms continue; there is loss of appetite, flesh and strength, but the patient is not yet confined to bed. The inflammation may occasionally assume rather a sub-acute form, but yields readily to treatment, and the patient, though gradually growing weaker, lives in hopes of a speedy recovery. This condition lasts a variable length of time, when, finally, a severe pain occurs in the region of the kidneys extending to the testicles; the urine becomes scanty and usually contains pus and blood; nausea and vomiting are present; the pulse becomes weak and thready; the patient passes into a profound stupor and death soon closes the scene.

TREATMENT: If the bowels are constipated, administer a sufficient amount of the Fl. Ext. of Cascara Sagrada before each regular meal to procure one or two medium actions from the bowels each day.

Where the irritation of the kidneys is great give from 20 to 30 drops of the Fl. Ext. of Polytrichum (Hair-Cap Moss) every four hours; and as the irritation subsides such remedies as the Fl. Ext. of Buchu or the Fl. Ext. of Hydrangea may be given. In some cases, especially where there is mucus and pus in the urine, Balsam of Copaiba, in from 10 to 20-drop doses two or three times

a day sometimes answers an admirable purpose. In all cases where the urine contains pus from the 1-10 to the 1-8 of a grain of the Sulphide of Calcium should be given every four hours.

If the urine is alkaline—and this may be known by its changing red litmus paper to blue—5 drops of Dilute Nitric Acid, largely diluted with water, should be given every three or four hours; or if the urine is strongly acid—and this may be known by its changing blue litmus paper to red—Bicarbonate of Soda should be added to a glass of water until the taste becomes evident and then used as a drink.

As an external application over the region of the kidneys, the Compound Tar Plaster will be found to answer a better purpose than any other counter-irritant known to the writer. It should be worn almost constantly if the patient can possibly bear it, and he can.

The diet must be nutritious, but easy to digest, avoiding stimulating articles of diet, fats and acids.

PYELITIS.

Pyelitis is an inflammation of the mucous membrane of the pelvis of the kidneys; characterized by pain in the region of the kidneys, a frequent desire to urinate, the urine being neutral or acid in reaction and of a milky appearance, not infrequently containing pus.

The most common cause of it is an obstruction of the ureters by calculi or tumors; however, inflammation of the bladder, especially gonorrhœal, by an extension of the inflammation through the ureters, may cause

it. Cold, exposure, rheumatism, the improper use of irritating diuretics, etc., may induce an attack.

SYMPTOMS: When it arises as a secondary affection it is preceded by the symptoms of the disease causing it.

An attack usually begins with chilliness, followed by slight fever, pain in the region of the kidneys, extending down the ureters and a frequent desire to urinate.

The urine presents a milky appearance, contains more or less pus, and, on standing, deposits a copious, yellowish or whitish sediment. In cases arising from stones in the pelvis of the kidneys, or in the ureters, blood usually appears in the urine.

In some cases there are irregular chills and fevers, followed by profuse sweats; while in others, there is a continued or typhoid type of fever, however, these conditions are not met with in all cases.

Where both kidneys are involved, uræmic poisoning may occur.

TREATMENT: Control the fever with sedatives administered according to indications. If the urine is markedly acid in reaction, which is usually the case, administer a solution of Bicarbonate of Soda as a drink.

If the inflammation is a result of the presence of renal calculi 20 drops of the Fl. Ext. of Hydrangea should be given every four hours; or where it is caused by an extension of an inflammation of the bladder, 20 to 30 drops of the Fl. Ext. of Chimaphila should be given three times a day before meals.

In some cases, especially where the urine is mucopurulent or where the disease is a result of gonorrhœa, from 10 to 20 drops of the Balsam of Copaiba should be given three times a day. It may be given in capsules.

In all cases where there is considerable pus in the urine—and its presence may be detected by obtaining a small amount of the sediment and adding an equal volume of Liquor Potassa to it, and causing them to thoroughly mix; if pus is present a viscid fluid is formed, which pours like thin jelly—the Sulphide of Calcium in doses of from 1-10 to 1-8 of a grain should be given every four hours.

If the case is a protracted one the application of a Compound Tar Plaster over the region of the kidneys, requiring the patient to wear it as much as possible, should not be neglected.

Where there are irregular chills, fevers and night-sweats, such remedies as Quinine, Aromatic Sulphuric Acid and the Oxide of Zinc should be given for their relief.

If the fever assumes a continued or typhoid type, treat it as such.

Keep the bowels open from the beginning of the attack. The most suitable remedy to use for this purpose is the Fl. Ext. of Carcara Sagrada.

The diet should consist principally of milk.

ACUTE ALBUMINURIA.

ACUTE BRIGHT'S DISEASE OF THE KIDNEYS.

This is "an acute inflammation of the epithelium of the uriniferous tubules; characterized by fever, scanty,

high-colored or smoky urine, dropsy, with more or less constant nervous phenomena, the result of acute uræmia.”—Hughes.

The most common causes of it are exposure to cold and damp; the eruptive fevers, especially scarlatina; diphtheria; the persistent use of such articles as turpentine, cantharides, phosphorus and ginger.

SYMPTOMS: “Occurring almost always after the eruptive fevers, or exposure to cold, by which the surface is suddenly chilled; it commences generally with a well-defined chill, symptomatic fever follows, the pulse being hard and frequent, the skin hot, dry and constricted, the tongue coated white, the mouth dry, frequently nausea and vomiting, bowels constipated, pain in the back, and marked restlessness and nervous irritation. With these symptoms the patient complains of a sense of weight and constriction in the region of the kidneys, never, as is said, extending to or causing retraction of the testicles. The pain may be confined to one side, but one kidney being affected; or it may be equally in both sides.

“With the occurrence of these symptoms the urine becomes scant, almost suppressed, and highly albuminous, of a reddish color, and occasionally bloody. Its specific gravity is almost always above that of healthy urine, and it gives an acid reaction. When allowed to rest, it deposits a filamentous substance, and when examined with a microscope, it presents blood-globules, mucus, epithelium, and in some cases, complete casts of the

urinary tubules. A dirty, white sediment is frequently deposited from the urine, not unlike mucus, and easily diffused by agitation. The urine is frequently passed with difficulty, and sometimes with pain, the calls to urinate being frequent and distressing. In the course of the second or third day dropsical symptoms make their appearance, most frequently as anasarca of the eyelids, face, and at last of the whole body. The skin at this time is hot, and does not pit except under firm pressure."

"If properly treated, in a majority of cases, we find the symptoms are much mitigated in the first three or four days, and the disease terminates in recovery by the twelfth to the fifteenth day. In other cases, coma comes on by the second, third or fourth day, and the disease terminates fatally within the first week. Occasionally convulsions appear, and continue until the patient is exhausted. In other cases the disease seems to give way slowly until it reaches the chronic stage, in which it continues."—Scudder.

TREATMENT: Control the fever with sedatives administered according to indications.

Administer a sufficient amount of Salts each day during the attack to keep the bowels open.

Put the patient to bed, require him to remain there, and apply hot poultices, cloths wrung out of hot water, or dry cups, over the region of the kidneys.

As soon as the more active symptoms have subsided 20 drops of the Fl. Ext. of *Asclepias Syriaca* must be given three or four times a day.

When dropsical symptoms make their appearance, give the patient 3 or 4 drops of the Fl. Ext. of Apocynum Cannabinum four times a day. If this fails to relieve the dropsy, $\frac{1}{6}$ of a grain of Elaterium should be given every four hours, until free watery discharges from the bowels are produced, and thus repeated every one, two or three days as is needed and the patient is able to bear it.

The following is also very beneficial in these cases and is frequently more efficient than the Elaterium:

Salts (Sulphate of Magnesia),...2 drachms,

Bitartrate of Potassium,.....1 drachm.

Mix, dissolve in water and give at one dose, repeating the same every four hours until copious watery discharges are produced from the bowels. This should also be repeated every day or so, as is necessary, when the patient is able to bear it.

The first symptoms of uræmic poisoning should be recognized and an appropriate treatment for this condition adopted.

When the general health is impaired, in the absence of fever, the following should be given:

Fl. Ext. of Nux Vomica,.....3 drachms,

Fl. Ext. of Hydrastis Can.,.....1 ounce,

Fl. Ext. of Gentian,.....3 ounces,

Aromatic Elixir, sufficient to make,.6 ounces.

Mix and give a teaspoonful three times a day before meals.

The diet should consist of milk, teas and soups.

CHRONIC ALBUMINURIA.

CHRONIC BRIGHT'S DISEASE.

This is "a chronic inflammation of the cortical and tubular structure of the kidneys; characterized by albuminous urine, dropsy, increasing anæmia, with attacks of acute uræmiæ."

"CAUSES: Rarely follows the acute form, but in ever so many cases the cause is unknown, and in the vast majority of cases it is primarily chronic or subacute; syphilis; chronic malaria; alcoholic excesses; chronic mercurialism; lead poisoning; opium habit; protracted suppuration; phthisis; hepatic disorders; pregnancy; some undetermined nervous condition."—Hughes.

SYMPTOMS: "There are no marked symptoms in the early stage of the disease to arrest the attention of the patient or the physician. It is noticed that the patient is gradually losing flesh and strength, and has a characteristic appearance. The skin is dry and somewhat harsh, and the patient does not perspire on active exertion as usual. The bowels are constipated, or in some cases irregular, diarrhœa alternating with constipation; the appetite is variable, and there are more or less dyspeptic symptoms and headache. These symptoms and loss of strength at last become so marked as to cause the patient to consult a physician, it may be months, or sometimes two or three years from the commencement of the indisposition. On close questioning, we will find that the patient has a weakness of the back, probably a sense of fullness in the loins, and his attention has

been drawn to slight difficulty in passing the urine, and some alterations in its physical properties. In all such cases the careful physician will institute an examination to determine whether it is normal or not, and the character of its constituents."

"We determine the presence of albumen by the fact that it coagulates on the application of heat, and the addition of a small quantity of Nitric Acid, and though other material might be thrown down by heat or acid, yet none other by both. If we desire to be accurate, a small portion of urine should be placed in a small test-tube, and heated over a spirit-lamp; but if this is not convenient, a common iron spoon may be filled half-full, and heated over a common lamp or candle. Dr. Bird recommends that the extreme end of the bowl be placed over the flame, and in this way the thin layer of urine near the end of the spoon soon boils, and the white striæ of the coagulated albumen gradually diffuses itself through the cooler liquid; in this way we can detect a very small quantity of this substance. The addition of a drop of Nitric Acid to albuminous urine immediately produces a copious coagulation of albumen. If but a small quantity is present, the opacity will disappear on agitation, but may be reproduced by the addition of a second drop. Both these tests should be employed, for, as before remarked, we may be deceived by one, but can not very easily with the two."

"As the disease progresses the patient becomes very feeble and cachectic, and frequently dropsical. The

appetite is poor, digestion feeble; the circulation weak; there is great emaciation; hectic fever appears in the evening, followed by night-sweats; the patient dying of gradual marasmus, or some other affection that is set up owing to the enfeebled condition of the system; or uræmia occurs, and carries the patient off in a very short time. Occasionally, in the later stages, the urine is scanty and but slightly albuminous, so there is some difficulty in determining the cause of the constitutional disturbance.”—Scudder.

TREATMENT: The disease is incurable, therefore, all that can be done is to prevent as much as possible the progress of the disease, treating the complications as they arise and palliate the patient's suffering.

Authorities very generally recommend a milk diet, or at most a very small amount of lean meat, fruits and vegetables, but the writer believes that the patient should be allowed to select his own diet, instructing him to carefully avoid all articles that he finds to disagree with him in the least; however, intoxicating drinks of all kinds must be positively prohibited.

Whenever fever is present, it should be controlled in this, as well as in any other disease, with sedatives administered according to indications.

Where the urine is alkaline, 10 drops of Dilute Nitric Acid, largely diluted with water, should be given three or four times a day; or if the urine is acid, a sufficient amount of Bicarbonate of Soda should be added to a

glass of water until the taste becomes evident, and the solution used as a drink.

Where there is scantiness of urine, from 20 to 30 drops of the Fl. Ext. of *Asclepias Syriaca*, or 30 drops of the Fl. Ext. *Chimaphila* should be given four times a day.

Instead of a scantiness of urine there is frequently an excessive flow. In these cases, the following should be given:

Fl. Ext. of *Ergot*,.....1 ounce,

Fl. Ext. of *Rhus Aromatica*,.....1 ounce.

Mix and give a teaspoonful, in a sup of water, three or four times a day.

If the bowels are constipated, they should be well regulated with *Cascara Sagrada*.

The entire body should be sponged each day with warm water, and in drying considerable friction should be used.

Counter-irritation over the region of the kidneys is very important, and for this purpose nothing answers better than the Compound Tar Plaster. It should be worn intermittingly, as long each time as the patient can bear it.

Where the patient is feeble or emaciated the following should be given:

Fl. Ext. of *Nux Vomica*,.....3 drachms,

Fl. Ext. of *Hydrastis Can.*,.....1 ounce,

Fl. Ext. of *Gentian*,.....3 ounces,

Aromatic Elixir, sufficient to make,.6 ounces.

Mix and give a teaspoonful three times a day before meals.

If there are any symptoms of dropsy, 4 or 5 drops of the Fl. Ext. of Apocynum Cannabinum should be given four times a day. Where this fails to remove the dropsical condition, $\frac{1}{6}$ of a grain of Elaterium should be given every four hours until free watery discharges from the bowels are produced, and thus repeated every one, two or three days as is needed and the patient is able to bear it.

The following is also very beneficial in these cases and is frequently more efficient than the Elaterium:

Salts (Sulphate of Magnesia),...2 drachms,

Bitartrate of Potassium,.....1 drachm.

Mix, dissolve in a half-glass of water and give at one dose, repeating the same every four hours until copious watery discharges are produced from the bowels. This should also be repeated every day or so, as is needed, when the patient is able to bear it.

Where there is great swelling of the feet and legs, a number of very small incisions may be made in them for the purpose of allowing the accumulated fluid to escape; or if the abdomen is greatly distended, tapping will have to be resorted to for the purpose of preventing suffocation.

Should hectic fever and night-sweats occur, such remedies as Quinine, Aromatic Sulphuric Acid, Oxide of Zinc and cold Sage Tea may be given with a view of controlling them.

Sexual intercourse must positively be prohibited.

DIABETES INSIPIDUS.

This is an affection the pathology of which is not very well understood; characterized by continued thirst and the habitual discharge of a large quantity of pale urine, containing neither albumen nor sugar. It is more common among children and young adults than older persons, and males are more subject to it than females.

The causes of it are obscure, but it is thought to result from blows on the head, diseases of the brain or nervous system, exposure to cold, drinking freely of cold fluids when heated, intemperance, etc. It may be hereditary.

SYMPTOMS: An attack may begin suddenly or gradually, though the first symptom that attracts attention is a frequent desire to urinate, the urine being very clear and voided in large quantities, the amount varying from one to four or five gallons during each twenty-four hours. Its specific gravity is low, generally ranging from 1.001 to 1.007. Albumen and sugar are absent.

The appetite is generally voracious; there is great thirst; the skin is dry and harsh, and the bowels are constipated. Unless relief is obtained, there is, sooner or later, great loss of flesh and strength. Diabetes insipidus may be mistaken for diabetes mellitus; in the latter there is sugar in the urine, while in the former it is entirely absent.

TREATMENT: Regulate the bowels with the Fl. Ext. of Cascara Sagrada administered before each regular meal; and with a view of diminishing the quantity of urine, the following should be given:

Fl. Ext. of Belladonna,..... $\frac{1}{2}$ drachm,

Fl. Ext. of Ergot,.....1 ounce,

Fl. Ext. of Rhus Aromatica,.....1 ounce.

Mix and give a teaspoonful four times a day; and, at the same time, give the following:

Sulphate of Strychnine,..... $1\frac{1}{2}$ grains,

Hydrochloric Acid,.....6 drops,

Water,.....8 ounces.

Mix and give a teaspoonful before each regular meal.

Fluids must be avoided as much as possible.

DIABETES MELLITUS.

This, as the preceding form, is an affection, the pathology of which is not very well understood; characterized by the constant presence of grape-sugar in the urine, an increased urinary discharge, thirst, and loss of flesh. All persons are subject to it, though it is more common in males than in females, and it occurs most frequently between the ages of twenty-five and fifty years.

The causes of it are obscure, but it is thought to be caused by diseases of the nervous system, the liver or kidneys; the excessive use of malt liquors, saccharine food, and sexual excesses. It is often hereditary.

SYMPTOMS: An attack usually comes on gradually, the first symptoms that attract attention being an excessive discharge of urine and the loss of flesh and strength, the appetite remaining unimpaired.

The amount of urine voided in each twenty-four hours varies from four to forty pints, of a specific gravity

ranging from 1.030 to 1.050, and contains a large amount of grape-sugar, which may be detected by various methods, the following being the one most commonly used:

MOORE'S TEST: Add to a small amount of the suspected urine about half its bulk of pure Liquor Potassa, then boil it gently for a few minutes; if sugar is present the liquid assumes an orange-brown, or bistre tint. The subsequent addition of an acid generally causes the evolution of an odor of boiling molasses.

As the disease advances the patient becomes very feeble and thin in flesh, so much so that he is confined to his room the greater part of the time. The skin is harsh and dry and the bowels are constipated. Usually thirst is almost constant and the patient drinks large quantities of fluids.

Finally, in the latter stages of the disease, there are evening fevers, and night-sweats, the thirst continuing, but the appetite much impaired. In some cases, pulmonary tuberculosis sets in and runs its course very rapidly; in others, there is colliquative diarrhœa, or the kidneys fail to perform their function and the patient dies of uræmia.

Diabetes mellitus may be distinguished from diabetes insipidus by the presence of sugar in the urine in the former disease and its absence in the latter.

TREATMENT: The treatment of diabetes mellitus is not attended with that degree of success that we might desire. The regulation of the diet is of the first importance in the treatment. Articles containing sugar or

starch, which is converted into sugar during digestion, must be prohibited or greatly restricted. The main diet should consist of animal products such as meats, eggs, butter, game, poultry and fish; however, such vegetables as cabbage, celery, lettuce, spinach, onions, tender green beans and tomatoes may be allowed. The free use of milk is generally beneficial, although, theoretically, it is contra-indicated. Tea and coffee may be allowed, and no benefit is derived by withholding water except excessive amounts. Saccharin may be used as a substitute for sugar in tea or coffee.

The patient should wear flannel next to the body the entire year; take a warm bath at least three times a week; and daily exercise in the open air should be taken when the weather is suitable.

If the bowels are constipated they must be well regulated with the Fl. Ext. of Cascara Sagrada administered before each regular meal.

The quantity of sugar in the urine, as well as the quantity of urine, may be diminished with the following:

Fl. Ext. of Belladonna,..... $\frac{1}{2}$ drachm,

Fl. Ext. of Ergot,.....1 ounce,

Fl. Ext. of Rhus Aromatica,.....1 ounce.

Mix and give a teaspoonful four times a day; and if the patient is feeble, emaciated, give the following at the same time:

Fl. Ext. of Nux Vomica,.....3 drachms,

Fl. Ext. of Hydrastis Can.,1 ounce,

Fl. Ext. of Gentian,.....3 ounces,
Aromatic Elixir, sufficient to make,.6 ounces.

Mix and give a teaspoonful three times a day before meals.

If the patient is afflicted with boils, or a carbuncle, from the 1-10 to the $\frac{1}{8}$ of a grain of the Sulphide of Calcium should be given every four hours.

Whiskey, when actually demanded to support the strength, may be used in small amounts.

Diarrhœa, when present, may be controlled in this as in any other disease. See Uræmia, and also Consumption.

RENAL CALCULI.

GRAVEL; RENAL COLIC.

Renal calculi or stones are concretions formed from constituents of the urine either in the substance of the kidneys or in their pelvis. When these concretions are very small (sand) the condition is known as gravel.

Their cause is unknown. They occur in persons of all ages, and are more common in males than in females. Some families seem to be particularly predisposed to them.

SYMPTOMS: Stones may remain in the kidneys a long time and produce no appreciable symptoms. Again, they may cause renal hemorrhage, congestion or inflammation, terminating in abscess.

When one of these concretions passes from the pelvis of the kidney into the ureter, a deep-seated, sharp, cutting, agonizing pain is felt in the region of the ureters, extend-

ing to the corresponding groin, testicle, penis, and thigh, with retraction of the testicle. At this time, the face is pale and the features pinched; the surface is cold and damp and the pulse weak. At times the pain is so severe that the patient faints, has a general convulsion, or passes into a stupor or unconsciousness.

There is a frequent desire to urinate, attended by burning pain, but only a few drops of urine pass and that is dark and often bloody. Where both ureters are obstructed it may be that no urine at all will be passed, and uræmic symptoms are very liable to arise.

The stone moves slowly towards the bladder and finally passes into it, when, the pain ceases suddenly, and there is usually the passage of more or less bloody urine, with which the stone may be discharged. When these concretions are very small, like sand, they may be passed with very little pain.

An attack lasts from an hour or so to several days. Persons, who have had one attack, are very liable to have another one.

TREATMENT: The first thing that demands our attention in the treatment of renal colic is the relief of pain; and for this purpose a $\frac{1}{4}$ of a grain of the Sulphate of Morphine should be given every hour or so, preferably hypodermically, as the urgency of the case demands, being careful, however, not to introduce a sufficient quantity of it into the system at one time to act as a poison.

Chloroform is also a very useful remedy in these cases. It may be given in 20 to 30-drop doses, largely

diluted with water, every twenty or thirty minutes until relief is obtained; or where the pain is exceedingly severe it may be very cautiously administered by inhalation, continuing its effects until the stone passes into the bladder.

The action of these remedies may be aided by a hot sitz-bath, or the application of hot poultices, or dry cups over the region of the kidneys.

For the purpose of controlling hemorrhage the following is very efficient:

Fl. Ext. of Ergot,.....1 ounce,

Fl. Ext. of Rhus Aromatica,.....1 ounce.

Mix and give a half-teaspoonful every three or four hours until the hemorrhage is checked.

As soon as the passage of the stone is effected, with a view of preventing the formation of another one, the Citrate of Lithium should be given in 5-grain doses in tablet form three or four times a day. From 30 to 60-drop doses of the Fl. Ext. of Hydrangea three or four times a day is also efficient in these cases.

Where the stone in the kidneys is too large to pass through the ureters the only hope of relief is by means of surgery.

URÆMIA.

URÆMIC POISONING.

This is a group of nervous symptoms resulting from an abnormal accumulation of the constituents of the urine in the blood.

The condition may be developed during the course of any disease in which suppression of urine occurs, but it is most frequently seen in nephritis, pyelitis, renal colic, Bright's disease, the puerperal state and after surgical operations upon the bladder, urethra, kidneys or womb. Malaria is also probably responsible for it in many instances.

SYMPTOMS: An attack is usually preceded by scantiness or suppression of urine; although, in some cases, during, or immediately prior to its development the urinary flow may be considerably augmented.

The symptoms, when well marked, are headache, vertigo, dimness of vision, deafness, drowsiness, and vomiting, frequently preceded or followed by convulsions, and then a deep sleep (coma) from which the patient may never be aroused.

There is usually more or less fever, and it sometimes runs quite high. The fever aids us in distinguishing uræmic coma from Opium poisoning, in which the temperature is below normal.

TREATMENT: Control the fever with sedatives administered according to indications, in this as in any other disease. Give a large dose of Salts every three hours until copious watery discharges are produced from the bowels. Administer a vapor bath; and if convulsions are present, control them with $\frac{1}{4}$ -grain doses of the Sulphate of Morphine, administered every hour or so, preferably hypodermically, as the urgency of the case demands.

If possible, restore the action of the kidneys. For this purpose give the following:

Acetate of Potash,.....5 drachms,

Water,.....2 ounces.

Mix and give a teaspoonful every three hours. The Fl. Ext. of Buchu in from 30 to 60-drop doses is also a valuable remedy in these cases.

If the attack results from malaria give Quinine as is recommended in remittent fever.

HEMATURIA.

HEMORRHAGES FROM THE URINARY PASSAGES.

Hemorrhage may occur from the kidneys, the ureters, the bladder, or the urethra.

The most common causes of it are injuries, especially falls or blows upon the loins, inflammation, irritating drugs, ulcers, and the presence of stones in the kidneys, or their passage through the ureters.

SYMPTOMS: When the hemorrhage is from the kidneys, the patient complains of more or less pain and fullness in the region of these organs, and the urine, when discharged, is thoroughly mixed with the blood.

When the hemorrhage is from the ureters there are paroxysms of colicky pain similar to those caused by the passage of a renal calculus; however, not so severe.

When the hemorrhage is from the bladder, there is pain in this organ, with more or less difficulty and pain in discharging the urine. There are only streaks of blood in the urine and these appear at the close of urination,

When the hemorrhage is from the urethra, there is a continual dripping or oozing of blood from the penis.

TREATMENT: Put the patient to bed, require him to remain quiet and administer the following:

Fl. Ext. of Ergot,.....1 ounce,

Fl. Ext. of Rhus Aromatica,.....1 ounce.

Mix and give a teaspoonful, in water, every three or four hours. Should this fail to check the hemorrhage, from 10 to 15 drops of the Oil of Erigeron should be given every four hours.

If the hemorrhage is from the bladder, it may be necessary to apply remedies to the inside of the bladder; though, a competent physician will have to be called to attend to this.

ACUTE CYSTITIS.

ACUTE INFLAMMATION OF THE BLADDER.

This is an acute inflammation of the mucous membrane of the bladder; characterized by fever, pain in the region of the bladder, a frequent desire to urinate, vesical tenesmus, and a burning or scalding sensation in the urethra.

The most common causes of it are exposure to cold and damp; external injuries over the region of the bladder; a foreign substance, as a stone, in the bladder; urethritis, especially gonorrhœal; stricture of the urethra; over-doses, or the continued use of irritating diuretics, and over-distention of the bladder by the long retention of urine. It is sometimes secondary to nephritis, fevers or diphtheria.

SYMPTOMS: An attack usually commences with pain in the region of the bladder followed by more or less fever. As the disease advances, there is an almost constant desire to urinate, attended by a burning, or scalding sensation in the urethra; and, when the urine is passed, there is a disposition to strain, or bear down, which greatly increases the patient's suffering. The urine, in some cases, is voided drop by drop, and it is not infrequently streaked with blood. Sometimes patients are unable to void the urine. In these cases there is distention of the bladder, and this produces great distress. The pain may extend to the penis, the perinæum and other parts in the region of the bladder.

In unfavorable cases, the fever may assume a continued or typhoid type. In these cases, there is frequently delirium or stupor, and sometimes convulsions. The patient's countenance becomes pale and death-like, and he shortly expires.

TREATMENT: Control the fever throughout the attack with sedatives administered according to indications. Keep the bowels moderately open. To accomplish this give Salts as is necessary.

The Fl. Ext. of Corn Silk should be given in teaspoonful doses every four hours. It is soothing to the bladder and is one of our very best remedies in these cases.

The following is also useful in these cases:

Acetate of Potash,.....	5 drachms,
Water,.....	2 ounces.

Mix and give a teaspoonful every four hours.

Hot poultices should be applied over the region of the bladder and to the perinæum, changing them sufficiently often to prevent their becoming cool. The hot sitz-bath may also be frequently used and it affords marked relief in a majority of cases.

When the pain is severe, an enema of Laudanum and warm water may be given. The proper amount of the Laudanum is 30 drops to 2 ounces of water.

After the more acute symptoms have subsided, excellent results follow the use of the following:

Boracic Acid,.....1 drachm,

Water,.....1 pint.

Mix and use as a wash for the bladder by means of a catheter. In using this wash a soft rubber catheter may be attached to a small funnel, which, after the catheter is introduced, should be raised above the patient's body and the fluid allowed to enter the bladder by the force of gravitation.

The patient should be confined to bed during the attack and restricted to a light diet.

CHRONIC CYSTITIS.

CHRONIC INFLAMMATION OF THE BLADDER.

This is a chronic inflammation of the mucous membrane of the bladder; characterized by pain in the region of the bladder, a frequent desire to urinate, with more or less mucus and pus in the urine.

It may result from a continuation, or the frequent repetition, of the causes that produce the acute form of

the disease, and it may also follow an acute attack.

SYMPTOMS: These are the same as the symptoms of acute cystitis, however, they are not so severe and there is usually the absence of fever, and the urine is most frequently alkaline and contains more or less mucus, or mucus and pus, and on standing it deposits a sediment.

The bladder is sometimes ulcerated; in these cases the urine is usually streaked with blood. As the disease progresses the bowels become constipated; the appetite impaired, and the patient gradually fails in flesh and strength.

TREATMENT: Regulate the bowels with the Fl. Ext. of Cascara Sagrada administered before each regular meal and give a teaspoonful of the Fl. Ext. of Corn Silk four times a day.

If the urine is alkaline, give 10 drops of Dilute Nitric Acid, largely diluted with water, three or four times a day. Instead of this from 5 to 10 grains of Benzoic Acid may be used two or three times a day.

If the urine is acid, the following should be given:

Acetate of Potash,.....5 drachms,

Water, to make,.....2 ounces.

Mix and give a teaspoonful three or four times a day.

It should be remembered that acids change the color of blue Litmus to red, and alkalies change the red paper to blue.

If these means fail to effect a cure the bladder should be washed out once a day with one of the following remedies:

Boracic Acid,.....40 grams,

Water (warm),.....4 ounces.

Mix and convey into the bladder, instructing the patient to retain it as long as possible, or:

Nitrate of Silver,1 grain,

Water (warm),.....4 ounces.

Mix and use as the preceding, or:

Bichloride of Mercury,..... $\frac{1}{2}$ grain,

Water (warm),.....12 ounces.

Mix and use as the preceding; however, do not use more than four ounces of it at once.

These washes may be introduced into the bladder by means of a soft rubber-catheter attached to a small funnel. After the catheter is introduced the funnel should be raised above the patient's body, when, the fluid will enter the bladder by the force of gravitation.

The late Dr. King recommends Elaterium in these cases. A tincture of it is made by adding one drachm of it to a pint of Alcohol. He says: "I have used this remedy since 1849, and with invariable success. In the more severe cases, I have usually commenced by giving half a fluid drachm of the Tr. of Elaterium, one, two, or three times a day, until it acted upon the bowels; and afterwards continued its use in doses of from 5 to 10 drops, gradually increasing the dose as it could be borne. Great relief has always followed in these cases, as soon as the purgative effect came on from the first large doses, and that, too, in cases where other purgatives had been frequently taken without any relief whatever. In less

severe cases I commence with 6 or 8 drops three times a day, gradually increasing it as can be borne, and being very careful to avoid giving it in doses to act on the bowels. This action I have only deemed necessary at the commencement of treatment in the more severe and obstinate cases. A great difference will be found among different persons as to the doses they can bear, therefore, some care should be used on commencing the treatment."

VESICAL CALCULUS.

STONE IN THE BLADDER.

By this is meant the presence of hardened concretions in the bladder, formed from materials in urine. These stones increase in size until they sometimes become enormously large.

The cause of their formation is not well understood.

SYMPTOMS: When there is a sense of weight in the perinæum, and, sometimes, of a body's rolling when the patient changes his position; a frequent desire to urinate, and a sudden stoppage to the flow of urine; pain and a sense of burning when the bladder is empty, becoming easier as this organ is filled, the presence of a calculus may be suspected. This, however, can not be positively known without the introduction of a sound into the bladder, when, if a stone be present, the characteristic click is produced by the metallic instrument's coming in contact with the stone.

TREATMENT: The stone, when small, may be removed by crushing it and then washing out the fragments; or by cutting into the bladder and removing it entirely. In

females, where the stone is not too large, the urethra may be dilated sufficiently for its removal through this outlet. Of course, no one but a competent surgeon should be entrusted with either operation.

ENURESIS.

INCONTINENCE OF URINE.

Incontinence of urine is an involuntary escape of this fluid from the bladder. There are two forms of the disease. In one, the urine is discharged in small amounts, especially when the patient is laughing, sneezing or coughing. The other form of the disease is seen principally in children and is characterized by nocturnal incontinence, or "wetting the bed."

It may result from irritability or paralysis of the bladder; enlargement of the prostate gland; injury to the spinal nerves; mechanical pressure as from tumors, stone in the bladder, pregnancy, etc.

TREATMENT: In many of these cases the following affords prompt relief:

Fl. Ext. of Belladonna,..... $\frac{1}{2}$ drachm,

Fl. Ext. of Ergot,..... I ounce,

Fl. Ext. of Rhus Aromatica,..... I ounce.

Mix and give a teaspoonful three or four times a day.

When it is dependent upon irritation of the bladder the treatment recommended for chronic cystitis should be given.

When it is a result of paralysis of the bladder, give the following:

Fl. Ext. of Nux Vomica,.....3 drachms,

Fl. Ext. of Hydrastis Can.,.....1 ounce,

Aromatic Elixir, to make,.....6 ounces.

Mix, give a teaspoonful three times a day, before meals.

When it arises from other diseases these will have to be overcome before a cure can be expected.

Treatment avails nothing in incontinence of urine arising from pregnancy.

ISCHURIA.

RETENTION OF URINE.

When the urine is excreted by the kidneys and conveyed to the bladder and retained in this organ, the condition is known as ischuria, or retention of urine. For information of the general reader we will just state that when the urine is voided with difficulty the condition is called dysuria; and when it is discharged drop by drop, and attended by a severe, burning or scalding pain, the condition is called strangury.

It may be the result of an impacted calculus; paralysis of the bladder; inflammation of the neck of the bladder; spasms of the muscles surrounding the urethra; enlargement of the prostate gland; stricture of the urethra; and the effects of over-doses of such remedies as Turpentine and Cantharides. It may also occur when the urine is voluntarily retained a considerable length of time after there has been a natural desire to void it.

SYMPTOMS: There is a constant desire to void the urine with an inability to do so, accompanied by a feeling of fullness and pain in the region of the bladder; and,

when the bladder is very much distended it may be felt through the abdominal wall above the pubic bone. If relief is not obtained the suffering increases hour by hour; and finally, sooner or later, the bladder ruptures, resulting in general peritonitis and death.

TREATMENT: The patient may be given a hot sitz-bath lasting for twenty or thirty minutes and then placed in bed and cloths wrung out of hot water applied to the perinæum and over the region of the bladder. Should these means fail, the bladder must be emptied by means of a soft, rubber-catheter.

When the retention is a result of paralysis, stricture or enlargement of the prostate gland, the catheter must be used several times a day, as is required, until the cause of the trouble is removed.

When the condition is the result of inflammation or irritation, teaspoonful doses of the Fl. Ext. of Corn Silk should be given three or four times a day.

DISEASES OF THE MALE ORGANS OF GENERATION.

PHIMOSIS.

This is an unnatural narrowness of the preputial orifice so that retraction of the prepuce behind the corona glandis is either difficult or impossible. The preputial orifice is sometimes so small that the stream of urine is greatly diminished.

In a great majority of cases the deformity exists from birth. In other cases, it results from inflammation caused by injuries, venereal diseases, etc.

TREATMENT: When it is a result of inflammation, the foreskin usually assumes its natural condition when the inflammation subsides.

In congenital phimosis the only remedy is an operation commonly known as circumcision. After the foreskin is removed, the outer skin and mucous lining should be carefully stitched together.

PARAPHIMOSIS.

By paraphimosis is meant a condition in which a narrow prepuce is retracted over the glans penis. This condition is occasionally met with in boys under ten years of age, who have, through curiosity, pushed the foreskin back behind the corona glandis and have been unable to return it. The foreskin, thus retracted, forms a constriction, which interferes with the circulation of blood, thus producing intense swelling, inflammation and finally gangrene.

TREATMENT: The foreskin must be returned to its natural position. To accomplish this anoint the parts thoroughly with vaseline or common lard, and then grasp the penis on each side between the index and middle fingers of each hand. Now, by pressing the head of the penis with the thumbs, and pulling up on the foreskin with the fingers, the difficulty may be usually overcome. Should this fail, after two or three attempts, the constriction will have to be relieved by means of a curved bistoury.

STRICTURE OF THE URETHRA.

This is a contracted, or narrowed condition of the canal through which the urine is discharged from the bladder.

It may result from inflammation, or the forcible and improper introduction of foreign bodies, such as catheters or bougies, into the urethra, but it is more commonly a result of gonorrhœa, especially neglected or badly treated cases.

SYMPTOMS: There is usually a gleet discharge from the urethra, accompanied by a frequent desire to urinate; difficulty in starting the flow of urine; a diminution in the size and force of the stream, which is usually twisted or divided. These symptoms become more marked as the disease advances, and finally a pain is felt in the neck of the bladder, in the glans penis and in the perinæum.

TREATMENT: There are three methods of treatment; gradual dilatation with the sound, cutting the stricture, and its removal by means of electricity. The first named is probably the best method. If this method is used, commence with a small sound, gradually changing to a larger size until the normal size of the urethra is reached, when, after using this sound for a few weeks, every third day, it should only be used once or twice a month.

BALANITIS.

Balanitis is an inflammation of the mucous membrane lining the foreskin and covering the glans penis.

It may be caused by uncleanness, gonorrhœa or irritation of the parts from any cause.

SYMPTOMS: The parts become tender, red and swollen, and there is a free discharge of mucus, or muco-pus thrown off from the surface.

TREATMENT: Keep the parts clean. The free use of warm water will accomplish this. The following is usually all that is required in these cases:

Sulphate of Zinc,.....	32 grains,
Sulphate of Morphine,.....	16 grains,
Rose-Water,.....	8 ounces.

Mix and bathe the parts freely with it every two or three hours; or:

Bichloride of Mercury,.....	4 grains,
Water,.....	8 ounces.

Mix and use as the preceding.

ORCHITIS.

INFLAMMATION OF THE TESTICLES.

Orchitis is an inflammation of one or both testicles either of an acute or chronic character.

It may be caused by exposure, or an injury, but it is more commonly a complication of mumps or gonorrhœa. The left testicle appears to be more subject to inflammation than the right one.

SYMPTOMS: These are usually fever, severe pain and tenderness with great swelling and constipation of the bowels.

TREATMENT: Control the fever with sedatives administered according to indications, adding *Phytolacca*, thus

Tr. of Veratrum Viride,.....18 drops,
 Fl. Ext. of Phytolacca Decandra,..12 drops,
 Water,.....18 teaspoonfuls.

Mix and give a teaspoonful every hour and a half while there is fever. If the stomach is irritated, of course, Aconite should be used instead of the Veratrum, and if indicated Gelsemium or Belladonna should also be given.

Require the patient to remain quiet in bed and support the testes with a small pillow between the thighs and use the following:

Muriate of Ammonia,.....2 drachms,
 Fl. Ext. of Phytolacca Decandra,...1 ounce,
 Alcohol,.....1 ounce,
 Water, sufficient to make,.....8 ounces.

Mix and apply by means of cloths saturated with the mixture, keeping them wet.

If the bowels are constipated give Salts or Seidlitz Powders when necessary, in order to keep them open.

Where the pain is very severe it may be necessary to give $\frac{1}{4}$ of a grain of the Sulphate of Morphine every two or three hours, for its relief.

In chronic orchitis, adhesive straps should be applied around the testicle in such a way that uniform pressure is made on the testicle; and a suspensory bandage should be worn all the time.

VARICOCELE.

Varicocele is a varicose, or enlarged, condition of the spermatic veins. In well-marked cases, the veins appear

knotted, and feel very much like a bundle, or mass of common earth-worms. The left side is more frequently affected than the right side. Severe cases are apt to result in atrophy, or wasting of the testicle.

Its causes are rather obscure, though it probably results from strains, overexcitement of the sexual organs, constipation, etc.

TREATMENT: A suspensory bandage should be worn until an opportunity is had to consult a competent surgeon, who may perform an operation that will effect a radical cure.

IMPOTENCE.

By impotence is meant an inability to perform the act of coition; and this inability may be transient or permanent.

It may arise from exhaustion of the genito-spinal center, and is then known as atonic impotence. The most common cause of this exhaustion is morbid sensitiveness and inflammation of the prostatic urethra. It may arise from some brain disease, which destroys the normal activity of the center (psychical impotence). It may be due to various diseases, acute or chronic, or be symptomatic of the administration of certain drugs or beverages.

SYMPTOMS: "It varies greatly in kind and degree in different cases. In one there is a total want of power to effect an erection. In another the erection is so brief that the act can not be completed. In a third, the seminal fluid is ejected before the erection is complete. In

a fourth, the ordinary excitement of copulation is not sufficient to effect the ejection. In the fifth, intercourse is not pleasurable, and gives satisfaction to neither party. In all, the patient feels badly, is nervous, disgusted with himself, and prays anxiously for relief."—Scudder.

TREATMENT: Correct any impairment of the general health that may be present; prohibit sexual intercourse entirely; require the patient to take moderate exercise in the open air each day; instruct him to associate with pleasant company; and to get his mind off of his malady entirely. Assure him that his condition will not terminate fatally; neither will he lose his mind; and that, ten chances to one, he will soon be well and strong.

If he is nervous and debilitated give the following:

Fl. Ext. of Nux Vomica,.....3 drachms,
Fl. Ext. of Hydrastis Can.,.....1 ounce,
Fl. Ext. of Damiana,.....3 ounces,
Aromatic Elixir, to make,.....6 ounces.

Mix and give a teaspoonful before each regular meal.

Phosphorus is also a valuable remedy in these cases. It may be given in from 1-50 to 1-100 of a grain, in pill-form, or in the form of Phosphide of Zinc in from 1-20 to 1-10 of a grain three times a day after meals.

Yohimbin is also useful in these cases. It may be given in doses of from 1-30 to 1-10 of a grain three times a day after meals.

Where there is nervous debility, in addition to the foregoing treatment, a current of electricity should be passed through the brain and spinal cord once a day.

The positive pole of the battery should be applied to the head and the negative, to the perinæum.

The diet should consist of such articles as fish, eggs, meats, oysters, milk, etc.

SPERMATORRHŒA.

By spermatorrhœa is meant an unnatural loss of semen. This loss may occur at night, during lascivious dreams, or the drain may be gradual and occur in the day-time. In some, the flow follows micturition, or an evacuation of the bowels. An occasional emission occurring in a healthy, unmarried adult can not be considered unnatural, as the semen is being secreted continuously and must escape in some way; but when these emissions are frequent, or when there is a constant drain, it results in a condition of great mental and physical weakness.

The principal causes of spermatorrhœa are self-abuse and excessive sexual intercourse.

“Often the victim of self-pollution and involuntary seminal losses, has had his case made worse by the representations of those who issue pamphlets, circulars, and advertisements, in order to scare the ignorant and swindle the inexperienced and the credulous. The reader of such literature is frightened into the belief that he can not be saved from idiocy or lunacy; and being thus discouraged, does not put forth the effort necessary to restoration.”—Howe.

TREATMENT: When the disease is a result of self-abuse, the patient must be impressed with the importance of abandoning the habit, as it is utterly impossible to

effect a cure without this; or if it is a result of excessive sexual intercourse, total abstinence must be enjoined.

The following answers an admirable purpose in these cases:

Sulphate of Strychnine,.....2 grains,
Dilute Hydrochloric Acid,.....1 drachm,
Dilute Phosphoric Acid,.....2 ounces,
Water, sufficient to make,.....8 ounces.

Mix and give a teaspoonful, in water, before each regular meal. In addition to this where there are lascivious dreams, with seminal emissions during the night 10 grains of Lupulin, or 20 grains of the Bromide of Potash, may be given at bed-time. Lupulin, however, is the preferable remedy. If the loss of semen occurs during an evacuation of the bowels, the Fl. Ext. of Gelsemium should be given in from 2 to 4-drop doses four times a day.

A final cure may be very materially aided by the use of electricity. The sponge-electrode should be attached to the positive pole of the battery and applied to the perinæum, and the electrode attached to the negative pole, should be applied to the lumbar region, the epigastrium or pubes, for at least fifteen minutes daily. Where the attack is of long standing, the electric current should be mild at first. The patient must form regular habits; take daily exercise in the open air; and avoid the use of spirituous liquors. If these means fail to effect a cure, a No. 8 bougie should be introduced in to the urethra twice daily. The instrument should be well oiled and then care-

fully carried the whole length of the urethra, including the prostatic portion of this canal. After the instrument is inserted, it should be left in place for five or ten minutes. The first few times the instrument is introduced it may occasion some pain, but this will pass away as the patient becomes accustomed to its use.

MASTURBATION.

SELF-ABUSE; SELF-POLLUTION.

By masturbation, or self-abuse, is meant an excitement of the genital organs by the hand. It is a vice indulged in, more or less by both sexes. The habit is occasionally met with in very young children, but it is more commonly commenced about the eighth or tenth year of age. In a majority of cases it is abandoned when patient arrives at maturer years.

The results of it are a weakness of the reproductive organs, nervous diseases, impairment of the mind, spermatorrhœa, varicocele, impotency, epilepsy, hysteria, insanity, and not infrequently suicide.

SYMPTOMS: These, at first, are only circumstantial. The patient is pale, has a downcast look, is unable to look another fairly in the face, and avoids company, especially strangers. If the general health is much impaired, we will find the appetite irregular, the bowels constipated, the tongue coated in the center, and the breath offensive. If the patient is a female, there is apt to be irregularity, or suppression of the menses. When the foregoing symptoms present themselves, a close watch

should be kept over the patient, to determine the correctness of our suspicion.

TREATMENT: This consists, usually, of proper advice from parents or guardians.

In boys, circumcision breaks the habit at once.

GONORRHŒA.

CLAPP.

Gonorrhœa is a specific inflammation, primarily involving the urethra of males and the vagina of females; characterized by pain, swelling of the mucous membrane and the formation of pus. In both males and females the inflammation may extend from the urethra into the bladder, ureters and even into the pelvis of the kidneys; and in the female, it not infrequently extends into the womb and on to the fallopian tubes and ovaries, setting up what is known as gonorrhœal salpingitis and ovaritis and in rare instances even peritonitis.

The disease is caused by the gonococcus of Neisser, a diplococcus occurring in groups of from ten to thirty, surrounded by a transparent mucus-like material. The germ is communicated by the parts coming in contact with pus containing them during sexual intercourse. Of course, the disease may be contracted in any manner that brings the gonorrhœal pus in contact with mucous surfaces, such as using the same vessel, privy, etc., that is used by one afflicted with the disease.

An inflammation, very much resembling that of gonorrhœa, may follow intercourse with a virtuous woman, during, or immediately after her monthly periods; or with

one afflicted with vaginitis or leucorrhœa, however, in this form of urethritis there is an absence of the gonococci.

SYMPTOMS: The disease usually makes its appearance in from two to five days after exposure. In the male, it commences with an uneasy, itching sensation in the end of the penis, just within the lips of the opening of the urethra. Soon after this a clear, whitish discharge appears, which shortly becomes thick and yellow. While urinating there is a burning sensation, which in some cases is extremely severe. In severe cases, the fore skin is inflamed and swollen, the parts presenting a reddened, angry appearance.

After the inflammation subsides to some extent, there are frequently painful erections during the night. Sometimes, when these erections occur, there is chordee, a condition in which the penis, instead of presenting a curvature upward and backward, is compelled to curve downward by the tumified and inextensible condition of the urethra and surrounding tissues. Occasionally there is tenderness with swelling of the inguinal glands, but suppuration is uncommon. In some cases the inflammation is so severe that it causes general febrile symptoms, which may last for a few days.

In the female, the disease is not usually as painful as it is in the male, however, there is a purulent discharge from the vagina and a burning, or scalding sensation in the parts with more or less pain in the back; and when the inflammation extends to the urethra a burning or scalding sensation is felt when the urine is discharged.

Of course, a cystitis is set up when the disease extends to the bladder; and a nephritis when it extends to the kidneys. When it extends into the womb an endometritis with more or less pain and cramping is established. When the disease extends to the fallopian tubes and ovaries there is pain, tenderness and cramping in each iliac region.

TREATMENT: During the first few days of an attack the patient should remain quiet and keep the bowels moderately open with Salts; and, the following wash should be used until the discharge becomes yellow:

Sulphate of Morphine,.....4 grains,
Glycerine,1 ounce,
Rose-Water, sufficient to make,.....6 ounces.

Mix and inject a syringe-ful into the urethra every two or three hours.

As soon as the discharge becomes yellow, use the following instead of the foregoing:

Sulphocarbolate of Zinc,.....30 grains,
Distilled-Water,12 ounces.

Mix and inject into the urethra every three hours. After injecting the first syringe-ful, which will wash out the urethra, immediately use another injection, which should be retained for two or three minutes.

The following are some of the more efficient washes in these cases:

Permanganate of Potash,.....3 grains,
Distilled-Water12 ounces.

Mix and use as the preceding, or:

Sulphate of Zinc,.....16 grains,
Aqueous Hydrastis Can.,.....1 ounce,
Distilled-Water,7 ounces.

Mix and use as the preceding.

If none of these washes seem to control the inflammation wash out the urethra thoroughly with the following, before using the medicated wash:

Peroxide of Hydrogen,.....3 ounces.
Distilled-Water.3 ounces.

Mix and inject several syringefuls into the urethra, retaining each one for a half-minute, after which use the medicated wash.

If the burning sensation during urination is severe, the following should be used:

Acetate of Potash,.....5 drachms,
Water, sufficient to make,.....2 ounces.

Mix and give a teaspoonful every four hours.

Where painful erections occur during the night, 20 grains of the Bromide of Potash should be given just before retiring. If this fails to afford relief 1 grain of Opium may be given at bed-time.

The proper syringe to use in the treatment of gonorrhœa is a blunt conical pointed rubber one holding $\frac{3}{8}$ of an ounce.

In the female, during the height of the inflammatory action, the vagina should be thoroughly washed out several times a day with warm water. As soon as the inflammation has subsided to some extent the following wash should be used:

Bichloride of Mercury,..... $7\frac{1}{2}$ grains,

Warm Water,.....1 pint.

Mix and inject into the vagina, with an ordinary household syringe, several times a day after washing thoroughly with warm water. If the urethra is involved, the syringe and washes recommended for the male may be used.

If the bladder is involved the treatment recommended for cystitis should be used; and if the kidneys are involved the treatment recommended for nephritis may be given. If the cavity of the womb is involved its cavity should be washed out once or twice a day with the mercurial solution previously recommended.

When the disease extends to the fallopian tubes and ovaries their removal offers the only hope of a cure.

Great care must be exercised by those who are suffering with gonorrhœa to prevent the introduction of any of the discharge into the eyes as it excites a very violent inflammation in these organs.

All meats and highly seasoned articles of food as well as stimulants must be prohibited. Coition must also be prohibited as it is almost always followed by a relapse.

GLEET.

Gleet is a chronic inflammation of the urethra and rarely, if ever, occurs except as a result of gonorrhœa. In many cases its immediate cause is a stricture of the urethra, which see.

Its only symptom of any importance, is a discharge of a clear, viscid fluid from the urethra.

TREAMENT: This should be commenced by the administration of the following:

Balsam of Copaiba,.....I ounce,
 Sweet Spirits of Nitre,.....I ounce,
 Oil of Santal,.....I ounce,
 Compound Tr. of Lavender,.....I ounce.

Mix and give a teaspoonful three times a day before meals.

The following should be used at the same time:

Elixir of Vitriol,.....32 drops,
 Distilled-Water,.....4 ounces.

Mix and use as an injection three or four times a day.

If the foregoing fails to effect a cure the trouble is probably caused by a stricture, which see.

SYPHILIS.

POX.

Syphilis, or pox, is a constitutional, hereditary, specific, infectious disease of three stages: PRIMARY, SECONDARY and TERTIARY.

The nature of its virus is unknown; but it is communicable by sexual intercourse, and by the virus coming in contact with an abraded surface or a mucous membrane, such as the lips, tongue and nose. Secondary, or tertiary syphilis may be transmitted to offspring, and it frequently gives rise to abortion about the fourth or fifth month of pregnancy; sometimes, the child is born at full term, but with copper-colored blotches and ulcers in various parts of the body, as well as having other symptoms indicative of the taint; and it is not uncommon for the wife herself

to become tainted with the secondary form of the disease when existing in the husband

PRIMARY STAGE; HARD CHANCRE: From two to six weeks, rarely longer, after exposure a burning itching sensation is felt, and, upon examination, a small circular or oval-shaped pimple, filled with a transparent fluid, and surrounded by a slightly inflamed surface, is found, usually on the genital organs, these being the parts most frequently exposed to the virus. This pimple soon assumes a yellowish color, breaks and forms a cup-shaped ulcer, from which an infectious matter is discharged. The tissues immediately surrounding the ulcer and constituting its base and walls become hard, hence the name indurated or hard chancre.

BUBO: This is an inflammation of the lymphatic glands of one or both groins, usually occurring after the local sore has existed for several days. It is caused by the absorption of the virus, and is believed by some, to be an intermediate condition between the primary sore and the secondary form of the disease.

In some cases, the inflammation terminates in the formation of an abscess, which, after the pus is discharged, leaves an open ulcer; in other cases, it terminates in resolution, the swelling gradually subsiding.

SECONDARY OR CONSTITUTIONAL SYPHILIS: Two forms of constitutional syphilis are recognized; secondary and tertiary. This form of the disease as previously stated results from the absorption of the syphilitic virus into the general system. Unless prevented by treatment, usually

in from six weeks to six months, sometimes longer, after the appearance of the primary sore, the secondary or constitutional symptoms make their appearance. These consist of a copper-colored eruption on the forehead, back, arms, legs, mouth and other parts of the body; the formation of small ulcers in the mouth and throat, and not infrequently more or less loss of the hair.

The eruption may consist of a copper-colored rash, with slight itching; as distinct copper-colored pustules, which form deep ulcers with a pale greyish bottom; as dusky brown tumors, which break and form scabs, under which the skin is extensively ulcerated.

TERTIARY SYPHILIS: Generally, in the course of six or eight months, if not prevented by treatment, after the secondary form of the disease has made its appearance, severe pains are experienced in various parts of the body; lumps called nodes appear on the bones, and these finally ulcerate, causing decay and exfoliation. The bones most frequently affected are those of the shin, elbow and forehead. Ulcers frequently form in the nose and destroy the surrounding tissues, so that the nasal passages and the mouth frequently form one cavity. Large, morbid growths may appear on various parts of the body. The brain and spinal cord are not infrequently involved producing insanity or paralysis.

TREATMENT OF PRIMARY SYPHILIS: If the patient is seen before the chancre becomes an open sore, the penis should be thoroughly washed with green soap and water that has been previously boiled, and, then washed with a

1 to 1000 solution of Bichloride of Mercury (about $7\frac{1}{2}$ grains to the pint). The sore should now be thickly covered with dry Iodoform and then covered with four or five layers of Iodoform-Gauze about an inch square. Carefully cover this with Bichloride-Gauze. Now apply a bandage or other dressing to hold all in place, being careful to leave the meatus exposed so that the urine can be discharged. In two or three days the outer dressing may be removed, and if the squares of gauze are adhered to the sore, do not remove them, but dress again with the Bichloride-Gauze as before and the sore will usually heal without pain, a severe sore or buboes.

If the sore is already an open one, the parts should be thoroughly cleansed, as previously recommended, removing all pus from the sore with Peroxide of Hydrogen before washing with the Bichloride Solution. Dress as before. The patient should be supplied with the Peroxide of Hydrogen, Bichloride Solution, Iodoform and Gauze and instructed to dress the sore every hour or so until the formation of pus is checked. Should this treatment fail to heal the sore, it should be carefully cleansed, dried and cauterized with the following:

Chloride of Zinc,.....1 drachm,
Water,.....1 drachm.

Mix and apply to every part of the sore with a soft pine stick. After all parts of the sore have turned white the zinc may be washed off and the sore dressed as previously recommended for an open sore.

If bubo is threatened require the patient to remain quiet and use the following:

Fl. Ext. of Phytolacca Dec.,..... $\frac{1}{2}$ ounce,

Tr. of Iodine,..... $\frac{1}{2}$ ounce.

Mix and apply over the region of the inflamed gland every three or four hours. If this does not control the inflammation, hot poultices should be used, changing them as they become cool, until the swelling becomes soft, which indicates the formation of pus. A competent surgeon should now be called and the part freely incised. The cavity, after the incision is made, should be carefully cleansed with Peroxide of Hydrogen, then, washed with the Bichloride Solution previously recommended. Now dust the wound freely with Iodoform and dress with the Gauze. Continue to dress in this manner until the wound is healed.

As soon as secondary symptoms make their appearance give the following:

Bichloride of Mercury,.....2 grains,

Iodide of Potash,.....1 ounce,

Water, sufficient to make,.....6 ounces.

Mix and give a teaspoonful after each regular meal.

The following is also very efficient in these cases:

Biniodide of Mercury,.....3 grains,

Alcohol,1 ounce.

Mix and give ten drops in a sup of water three times a day after meals.

If the patient becomes debilitated omit the alteratives each alternate week and give the following:

Fl. Ext. of Nux Vomica,.....3 drachms,
 Fl. Ext. of Hydrastis Can.,.....1 ounce,
 Fl. Ext. of Gentian,.....3 ounces,
 Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful three times a day before meals.

Ulcers appearing externally may be cleansed with Peroxide of Hydrogen, then, dusted with Iodoform and covered with Bichloride-Gauze.

The ulcers in the mouth, throat and nose, may be touched with Stick-Nitrate of Silver, Tr. of Iodine, or Tr. of Chloride of Iron; and if considerable inflammation is present the throat should be steamed and then, hot poultices applied.

The foregoing treatment is all that is required for constitutional syphilis in any stage, however, it might be added, that the patient should take a bath as hot as can be borne at least every third day.

Where the beard, hair or eye-brows are lost, the following will be found an excellent remedy to revive the deadened hair-follicles:

Fowler's Solution of Arsenic,.....4 drachms,
 Tr. of Cantharides,.....4 drachms,
 Glycerine,1 ounce,
 Rose-Water, sufficient to make.....8 ounces.

Mix and rub into the scalp, face, or eye-brows, twice a day.

When sleep is disturbed by pains Chloral Hydrate, or the Sulphate of Morphine, may be given.

The bowels must be kept regular. For this purpose, the Fl. Ext. of Cascara Sagrada may be given, when necessary, in from 10 to 20-drop doses, three times a day either increasing or diminishing the dose according to its effects on the bowels.

The diet of syphilitic patients must be generous, and of the most nutritious character, but the use of fats must be prohibited.

CHANCROID.

SOFT CHANCRE.

Chancroid is a local, specific, infectious disease usually occurring on the genital organs, as ulcers, sometimes very numerous and occurring from three to five days after exposure to its virus.

The nature of its virus is unknown, but it is communicated by sexual intercourse and by the virus coming in contact with an abraded surface or mucous membrane.

SYMPTOMS: Unlike the hard chancre, in this, two or more sores frequently appear at the same time and may, and frequently do, appear on a person who also has a hard chancre. It first appears as vesicles, which, in the course of two or three days, are converted into pustules. These break and form ulcers, which have a tendency to coalesce, thus making one or more large sores. The primary sore or sores, in chancroid, have a ragged margin; their bottoms are covered with a greyish, tenaceous material; and the surrounding tissues, and the base upon which they stand are soft, hence, the name soft chancre. Any portion of the patient's body may be inoculated with

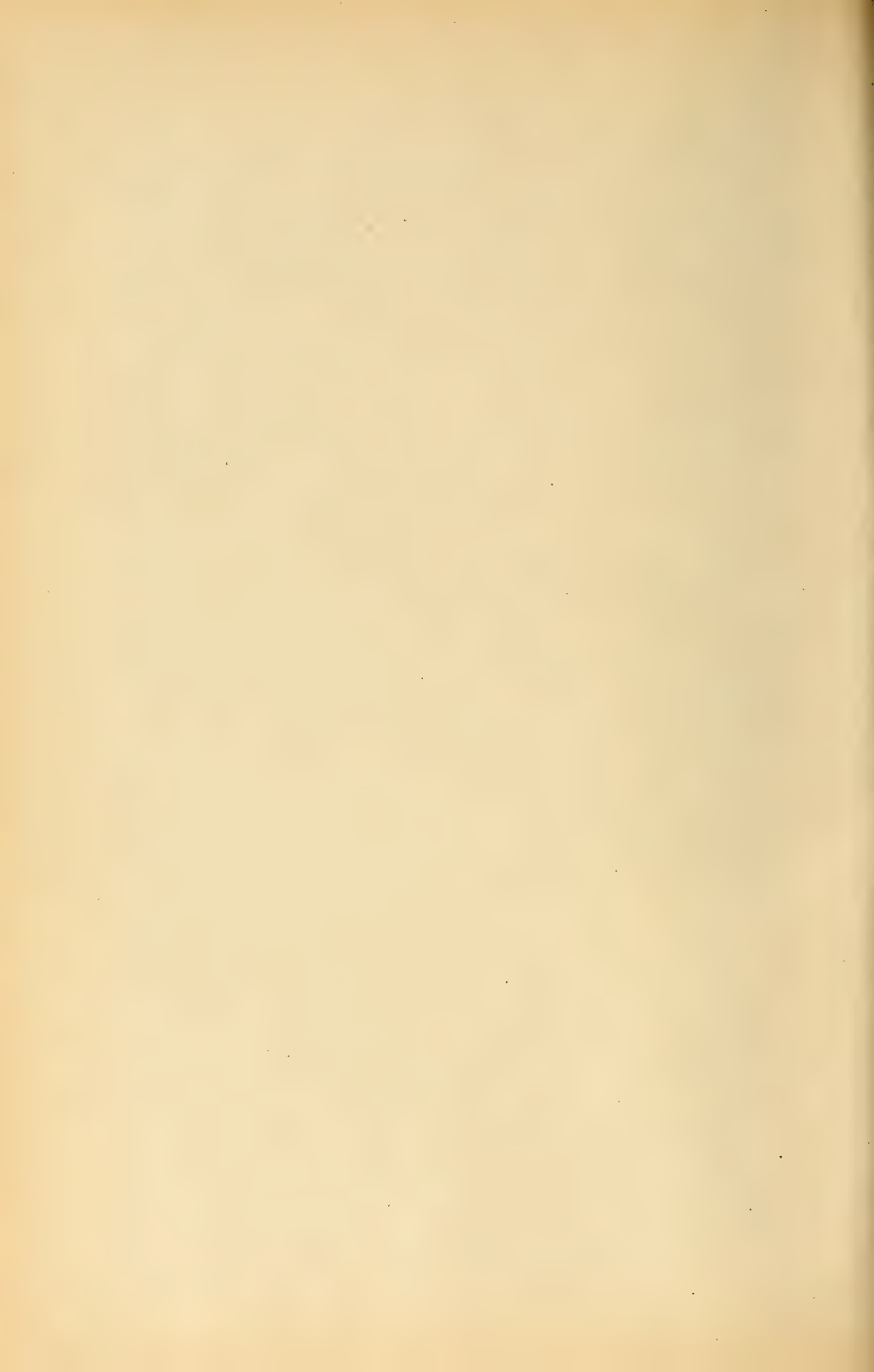
the virus from one of these sores, and an ulcer, in all respects similar to the original, will occur at the point of inoculation, but this is not the case with hard chancre.

TREATMENT: This is local, only, and consists of the same treatment that is recommended for hard chancre, however, the following is very efficient in these cases:

Fl. Ext. of *Echinacea Angustifolia*, . . . 2 ounces,

Water, 2 ounces.

Mix and keep the dressings of the part wet with it.



PART VII.

DISEASES OF THE NERVOUS SYSTEM.

The nervous system consists of the brain, spinal cord and various nerves of the body.

PHRENITIS; MENINGITIS.

INFLAMMATION OF THE BRAIN AND ITS MEMBRANES.

By phrenitis, or inflammation of the brain, is meant an inflammation of the parts contained in the cavity of the cranium. When the disease is confined to the membranes of the brain, it is called cerebral meningitis; and when it is confined to the substance of the brain, it is called cerebritis. The membranes and the brain substance may be involved at the same time; and as it is impossible to decide during life which is the seat of the disease, we shall consider them under one head. It may occur in adults, as an original disease, but in children it usually occurs as a complication of some other disease. In some sections of country it is improperly called "brain-fever."

An attack may be caused by falls, or blows on the head, exposure to the direct rays of the sun, intemperance, erysipelas of the head, prolonged mental excitement, a metastasis of rheumatic or gouty inflammation, cold, fatigue, etc., etc.

SYMPTOMS: The disease, although preceded by dizziness, a sense of pain and fullness in the head, confusion of the mind, and disturbed sleep, is usually ushered in with a well-marked chill, or rigor, continuing from one, to five or six hours. Following this there is generally a very high fever, a full, rapid pulse, hot dry skin, a whitish, furred tongue, scanty high-colored urine, and constipated bowels. The head becomes hot; the face turgid; the eyes watery, and the pupils contracted; and there is a violent throbbing pain in the head. As the disease progresses, the patient becomes more restless; the pain in the head increases; there is intolerance of light and sound; ringing in the ears; and delirium, sometimes of a violent form. The fever, up to the third or fourth day, is usually continuous, however, there is sometimes a slight remission in the morning.

The delirium soon becomes low and muttering; and the pupils, which were at first contracted are now dilated; the patient lies on the back; slips down towards the foot of the bed; picks at the bedding; and grasps at imaginary objects. Breathing becomes stertorous; the extremities cold; the body covered with clammy perspiration; and death shortly closes the scene.

“It must be remembered that these symptoms vary, being very mild with some, and extremely violent with others, depending upon the degree of vital energy of the system, the severity of the cause, and other attending circumstances.”

"In children we frequently find inflammation of the brain making its appearance during the progress of other diseases. The head becomes hot, the face turgid, the pupils contracted, with great restlessness and constant movement of the head. Though not very marked on account of age, the child is evidently delirious, and the frequent movements of the head, and putting the hands up to it, show that it suffers pain. In other cases, the acute stage has passed without notice, the face is blanched and contracted, or white and puffy, the pulse small and very frequent, the extremities cool, bowels loose, the discharges being unnatural and offensive; there is continued movement of the head and restlessness, or a deep stupor or coma. Sometimes these symptoms continue three or four days, but at other times the disease terminates fatally within forty-eight hours."—Scudder.

TREATMENT: Keep the head cool and the feet warm. The first may be accomplished by pouring cold water on the head, or the application to it of bags of pounded ice; and the latter by bathing the feet in warm water several times a day and afterwards applying hot rocks, bricks, irons, etc., to them.

Control the fever with sedatives administered according to indications throughout the attack, using rather large doses of Gelsemium. Bromide of Potash may also be used in these cases. The indications for it are the same as those for Gelsemium. In addition to the sedatives, when the fever is high and the pupils not abnor-

mally large 5 grains of Acetanilide may be given every three or four hours.

In full-blooded patients a brisk cathartic should be given at the commencement of the attack; and, subsequently, Salts should be used daily to keep the bowels open.

Where there is scantiness of urine give the following:

Acetate of Potash,.....5 drachms,

Water, sufficient to make,.....2 ounces.

Mix and give a teaspoonful, in a sup of water every three or four hours until the desired effects are obtained.

Where the tongue is broad and pallid, the coating consisting of a dirty whitish material, give 20 grains of the Sulphite of Soda, in a large sup of water, every four hours until the color and coating of the tongue is changed.

Where the patient is restless, unable to sleep, nervous, delirious or picking at the bedding, give 10 grains of the Hydrate of Chloral, in Mint-Water, every half-hour until it produces quietude, then, continue its use just often enough to keep the patient quiet.

Sometimes the fever is distinctly periodic, especially in malarial countries. In these cases Quinine should be given during the remission as is recommended in remittent fever.

If necessary to sustain the patient's strength, stimulants may be given; and for this purpose, the Aromatic Spirits of Ammonia may be given in 20 to 30-drop doses every one, two, or three hours as is needed.

If the fever assumes a typhoid type, treat it as such.

During convalescence, every precaution must be used to avoid mental excitement.

The diet should be nutritious, but easily digested, being careful to avoid over-taxing the stomach.

Where the patient is greatly debilitated the following may be given:

Fl. Ext. of Nux Vomica,.....3 drachms,

Fl. Ext. of Hydrastis, Can.,..... 1 ounce,

Fl. Ext. of Gentian,.....3 ounces.

Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful before each regular meal.

CEREBRAL HEMORRHÆGE.

APOPLEXY.

Apoplexy is the sudden rupture of an artery of the brain or meninges or the plugging of a cerebral vessel by an embolus causing pressure and more or less destruction of brain-substance; characterized by sudden unconsciousness, irregular noisy breathing and muscular relaxation.

The principal cause of it is a diseased condition of the blood vessels of the brain. The excessive use of alcoholic liquors, Bright's disease of the kidneys, syphilis and gout are predisposing causes. One attack, on account of the condition of the blood vessels of the brain, predisposes to another. It is rarely seen in persons under the age of forty.

SYMPTOMS: An attack may commence suddenly or be preceded by premonitory symptoms as headache, ringing in the ears; dizziness; transient deafness or blindness; a

sensation of numbness of the extremities; and twitchings of the muscles. Finally the patient falls down in a more or less unconscious condition; and motion and sensation are partly or entirely suspended. The respirations are shallow and noisy; during inspiration the cheek of the paralyzed side is drawn in and during expiration it is puffed out; the pulse is slow and full, sometimes irregular; one pupil may be contracted and the other one dilated and they do not respond to light. The face is usually flushed; the carotids throbbing; and the temperature may be a degree or two too low, but rises within twenty-four hours to 100 or 101 degrees; or in very severe cases to 107 or 108 degrees. In the latter cases death soon closes the scene.

An attack may be followed by partial loss of speech, impairment of the mind and paralysis of various parts of the body. Other attacks, sooner or later, are very liable to follow.

TREATMENT: If there are premonitory symptoms require the patient to remain perfectly quiet; administer a full dose of Salts, and give 3 or 4 drops of the Fl. Ext. of Gelsemium every hour until relieved or until drooping of the eyelids or double vision is produced.

When the attack occurs, loosen the clothing; place the patient in a cool quiet room, on the side with the face rather downwards so that the tongue and secretions will fall forward, instead of backwards into the pharynx. Apply ice or cold water to the head; place the feet in hot Mustard-Water, and if the pulse is full and strong give

one drop of the Tr. of Veratrum Viride every hour; and if there is throbbing pain in the head or throbbing carotids add 1 or 2 drops of the Fl. Ext. of Gelsemium to each dose of the Veratrum. When they are both used they may be prepared as follows:

Tr. of Veratrum Viride,.....18 drops,
 Fl. Ext. of Gelsemium,.....36 drops,
 Water,18 teaspoonfuls.

Mix and give teaspoonful doses.

If during the attack the face is pallid and the pulse weak or irregular, 20 to 30 drops of the Aromatic Spirits of Ammonia should be given every hour, or oftener if necessary; and in addition to this the following should be given:

Fl. Ext. of Digitalis,.....12 drops,
 Fl. Ext. of Cactus Grand.,.....24 drops,
 Water,.....12 teaspoonfuls.

Mix and give a teaspoonful every two hours.

Where any part of the body becomes swollen or œdematous give 3 or 4 drops of the Fl. Ext. of Apocynum Cannabinum four times a day.

For the purpose of promoting the absorption of the clot the following should be given:

Iodide of Potash,.....1 ounce,
 Water, sufficient to make,.....6 ounces.

Mix and give a teaspoonful after each regular meal.

The patient must avoid intemperance of every kind and also mental or physical excitement and worry. The bowels and kidneys should be kept in a normal condition.

SPINAL MENINGITIS.

This is an inflammation of the membranes covering the spinal cord; characterized by fever, pain in the back; and, when the cord itself is involved, paralysis. When the substance of the cord is inflamed, it is called myelitis.

The disease is due to infection from the tubercle bacillus, syphilis, typhoid fever, septicæmia, the influenza bacillus, etc., or the result of a wound of the spine.

SYMPTOMS: An attack is usually ushered in with a well-marked chill, followed by fever with a hot, dry skin, white coated tongue, scanty, high-colored urine and constipated bowels. Severe pain in the spine, aggravated by the slightest movement is a constant symptom. There are spasmodic contractions and rigidity of the muscles supplied by the nerves originating at the seat of the inflammation. When the upper part of the spine is involved, the patient's head is drawn backward; the pulse is weak, and there is difficulty in breathing and swallowing; or if the lower part is involved there may be an inability to discharge the urine and fæces, or the evacuations occur without the patient's knowledge. This is especially true when the cord itself is involved.

About the third or fourth day the fever reaches its height, and soon assumes a typhoid or continued type; the patient becomes stupid, or there is low muttering delirium, and finally, when the attack is severe, or the result of a wound of the spine, there is paralysis, which is usually permanent, of the parts below the seat of the inflammation. An attack usually lasts from two to ten weeks.

TREATMENT: Control the fever in this as in any other disease, with sedatives administered according to indications.

Require the patient to lie upon the side or face. Apply dry cups, or a cloth, wet with the White Liniment, along the spine. In very severe cases, a plaster of the Cerate of Cantharides may be applied to the spine however, this is rather heroic for this enlightened age.

At the beginning of the attack the following may be given:

Calomel,.....	1 grain,
Powd. Ipecac,.....	1 grain,
Bicarbonate of Soda,.....	10 grains.

Mix, divide into five powders and give one every hour. If they fail to act on the bowels, Oil, Salts or a Seidlitz Powder should be given. Afterwards throughout the attack keep the bowels slightly open with the Fl. Ext. of Cascara Sagrada.

For the purpose of controlling the muscular contractions from 5 to 10 drops of the Fl. Ext. of Gelsemium may be given, preferably hypodermically, every half-hour as is required, watching its effects and discontinuing its use, temporarily, when double vision, drooping of the eyelids or under jaw is produced.

If the tongue is broad and pallid, the coating consisting of a dirty, whitish material, give 20 grains of the Sulphite of Soda every three or four hours until the color of the tongue is changed.

If there is scantiness of urine, give 20 grains of the Acetate of Potash every three or four hours until the

desired effects are obtained; when, it should only be administered occasionally, as is needed to continue its effects:

If there is retention of urine, the bladder must be emptied, as often as is necessary, by means of a soft, rubber-catheter.

If the disease is a result of syphilis, the following should be given:

Bichloride of Mercury,.....2 grains,
Iodide of Potash,.....1 ounce,
Water, sufficient to make,.....6 ounces.

Mix and give a teaspoonful three times a day after meals.

When the disease arises from an injury that causes compression of the spinal cord, no time should be lost in procuring the services of a competent surgeon, who will remove that portion of the bones of the spinal column causing the compression.

When the inflammation arises as a complication of some other disease, an appropriate treatment for the disease causing it should be adopted.

If the fever assumes a typhoid type treat it as such.

When there is paralysis the treatment recommended for that condition should be adopted at once.

The system should be supported with nutritious food, and stimulants, when necessary.

SPINAL IRRITATION.

This is a condition frequently met with, especially in women between the ages of fifteen and twenty-five.

It may be caused by spinal shock, or concussion from any cause, and all those practices and habits, which cause nervous strain and result in nervous exhaustion. It may also be induced by the excessive use of opium or alcoholic liquors. Hysteria often causes or accompanies it.

SYMPTOMS: Tenderness, excited either by pressure or motion, is a constant symptom. It may extend along the entire length of the spine, or be confined to a very small portion of it. When the affection is confined to the upper part of the spine, some of the following symptoms are usually present: headache, dizziness, sleeplessness, more or less mental disturbance, shortness of breath, palpitation of the heart, pain in the stomach, nausea and vomiting, and sometimes dyspepsia. When the irritation is confined to the lower part of the spine, there are neuralgic pains and weakness in the lower limbs, pain in the abdominal and lumbar regions; and, in females, ovarian pains and disorders of menstruation.

The symptoms are always variable and inconsistent, and the pains frequently shift from one part to another.

TREATMENT: If possible remove the cause. Administer 3 or 4 drops of the Fl. Ext. of Nux Vomica before each regular meal, and apply a Compound Tar Plaster to the spine, over the tender region. Require the patient to wear it as long as it can be borne, when it should be removed for a few days and then applied as before and thus continued until a cure is effected.

The bowels must be well regulated; the diet nutritious but easily digested; and the patient should take moderate exercise, daily, in the open air.

LOCOMOTOR ATAXIA.

Locomotor ataxia is a hardening (sclerosis) of the posterior columns of the spinal cord; characterized by loss of co-ordination; neuralgic pains in the limbs; absence of knee-jerk; loss of sensation, and failure of the pupils to respond to light.

The causes of the disease are very obscure, but it is believed that exposure to cold and dampness, excessive sexual indulgence, drunkenness, syphilis, and mental overwork, are largely instrumental in its production. It is thought, in some cases, to be hereditary. It is more frequently met with in men than in women; and it usually occurs between the ages of twenty-five and fifty.

SYMPTOMS: The disease usually commences with sharp, darting, electric-like pains in the legs, associated with a loss of sensation in the feet, the patient being unable to distinguish between hard or soft substances in walking; and if the upper part of the cord is involved, the patient is unable to button his clothing. There is a sensation as if ants were crawling over the surface, especially in the legs and about the waist; and there is an impairment of vision and a failure of the pupils to respond to light; absence of knee-jerk; nocturnal emissions of semen, and finally impotency.

As the disease progresses, sensation is blunted; in some cases, several minutes elapse, before pain is felt,

after sticking the patient with a needle. After a time, all control over the motion of the legs is lost; walking is greatly interfered with or is impossible; and when the eyes are closed, it is almost impossible for the patient to maintain the erect position.

TREATMENT: The disease is incurable, but the life of the sufferer can be prolonged and his discomfort lessened. Rest in bed, even for months, must be enjoined. The use of the following is said to retard its progress:

Bichloride of Mercury,.....2 grains,
Iodide of Potash,.....1 ounce,
Water, sufficient to make,.....6 ounces.

Mix and give a teaspoonful three times a day after meals. The Chloride of Gold and Soda in doses of 1-20 of a grain three times a day often remarkably retards the progress of the disease. The best results are said to follow the use of silver. The Nitrate of Silver may be given in from 1-4 to 1-2 grain, or the Oxide of Silver in 1-2-grain doses three times a day. When the silver is used its administration should be suspended at intervals of a few weeks to prevent discoloration of the skin.

Electricity is recommended by some authorities and condemned by others.

The pains must be controlled with Chloral Hydrate, Codeine or Morphine. The use of the latter should not be commenced as long as it can be avoided.

The diet must be highly nutritious and of an easily assimilated character.

VERTIGO.

DIZZINESS.

This is a condition in which the individual affected or the objects about him, seem to be in rapid motion, either of a rotary, circular, or a to-and-fro kind. It is not really a disease, but a symptom, and may occur as a result of various disorders, the most common of which are indigestion, nervous exhaustion, and diseases of the ears. When it appears in an aggravated form, it indicates disease of the brain, kidneys, liver, or heart. The condition is also occasionally met with in women at the "change of life," and as a result of suppressed menstruation.

TREATMENT: When possible, remove or relieve the condition causing it. If it is a result of indigestion, regulate the diet, and adopt the treatment recommended for dyspepsia.

If it is a result of nervous exhaustion, remove the cause and give 4 drops of the Fl. Ext. of Nux Vomica before each regular meal; and if the bowels are constipated, regulate them with the Fl. Ext. of Cascara Sagrada.

When it arises from other causes a competent physician should be consulted.

COUP-DE-SOLIEL.

SUN-STROKE.

"By sun-stroke is meant a sudden prostration of the nervous system, as a result of extreme heat."

SYMPTOMS: "The symptoms that indicate an approaching sun-stroke are a heavy feeling in the head, dizziness,

derangement of vision, ringing in the ears, faintness, and difficult breathing. Sometimes these symptoms are absent, and the patient falls unconscious without warning.

"After the attack the pulse is frequent and irregular; breathing is difficult; the face is of a dusky, red color; the head is hot; nausea and vomiting are usually present; and sometimes the bowels and bladder move involuntarily."

"In severe cases these symptoms may continue to increase, and the disease terminates fatally in a few hours, while in others, they gradually subside, and the patient slowly regains consciousness. The sufferer is greatly prostrated for some time after the sun-stroke. Dizziness and faintness come on after the slightest mental effort; and a full distressed feeling in the head continues to affect him for months afterwards."—Gunn.

TREATMENT: The patient should be immediately removed to the shade and placed in a recumbent position, being careful to allow a free circulation of air. Apply cold water, or bags of pounded ice to the head; and stimulants to the extremities. Give stimulants, such as 20 to 30 drops of the Aromatic Spirits of Ammonia, repeated every half-hour or so, or Brandy or Whiskey freely. The latter may be used hypodermically if the patient can not swallow. If these are not at hand, from 1-40 to 1-30 of a grain of the Sulphate of Strychnine may be given every three or four hours, preferably hypodermically. If the pulse is weak the following should also be used:

Fl. Ext. of Digitalis,.....12 drops,

Fl. Ext. of Cactus Grand.,.....24 drops,

Water,.....12 teaspoonfuls.

Mix and give a teaspoonful every two hours until the pulse becomes normal.

When improvement begins, keep the patient quiet; continue the stimulants in small quantities; withhold all indigestible articles of food; and keep the bowels well regulated with the Fl. Ext. of Cascara Sagrada.

The nervous system may be greatly strengthened by the use of 4 drops of the Fl. Ext. of Nux Vomica before each regular meal.

CHOREA.

ST. VITUS' DANCE.

Chorea, or St. Vitus' dance, is a disease of the nervous system, usually occurring between the ages of six and sixteen; characterized by constant twitchings and irregular movements of the voluntary muscles, especially of the face and limbs. Girls are more subject to it than boys.

The most common causes of it are thought to be mental emotions, fright, falls, injuries, worms, masturbation, and debility from previous disease. In some cases, it is thought to be hereditary. Some authorities believe that it is infectious, but there seems to be no evidence whatever to support such a belief.

SYMPTOMS: The disease commences with convulsive movements, or rather twitchings, of the fingers, muscles of the face, or other parts of the body. These, at first, are slight, but as the disease advances, they gradually

increase, until, in severe cases, the hands can not be controlled sufficiently to write or work. Walking is difficult; speech is affected; and the patient makes wry faces, seemingly on purpose. During sleep these irregular movements abate, or cease. Should the disease continue any considerable length of time, the mind becomes somewhat blunted, and the memory impaired.

TREATMENT: Confine the patient to bed in a darkened room, and if the cause of the disease can be determined, remove it.

If the bowels are constipated regulate them with Fl. Ext. of Cascara Sagrada. It may be given in from 5 to 20-drop doses before each regular meal, either increasing or diminishing the dose according to its effects.

Where there is scantiness of urine, give from 15 to 20 grains of the Acetate of Potash, largely diluted with water, four or five times a day.

If the muscular movements interfere with sleep, the Hydrate of Chloral should be given.

Our principal remedy in the treatment of chorea is Fowler's Solution of Arsenic. The dose, at first, should not exceed one or two drops three times a day, after meals, but the dose may be gradually increased to 10 drops three times a day and continued until it produces œdema, or swelling of the tissues around the eyes, or slight disturbance of the stomach or bowels, when, the dose should be gradually decreased until the symptoms produced by the remedy disappear.

The Fl. Ext. of Black Cohosh is also an efficient remedy in these cases, especially where the disease follows an attack of rheumatism. It may be given in the form of the Fl. Ext. in from 10 to 30-drop doses three times a day.

The diet should be nutritious but easily digested.

EPILEPSY.

Epilepsy is a chronic disease of the nervous system, usually beginning in early life; characterized by paroxysms of sudden loss of consciousness, and convulsions. These paroxysms occur at irregular intervals, the periods between them, in some cases, being only a few minutes, or hours, while in others several days, or even months, may elapse.

The disease in many cases, is the result of an inherited tendency; while in others, it is the result of intemperance; excessive sexual indulgence; self-abuse, fright, mental worry, blows on the head, syphilis, diseases of the womb, thickening of the membranes of the brain; and tumors of the brain.

TREATMENT: All that can be done during the paroxysms is to loosen the clothing around the neck and waist; place a cork or a soft piece of wood between the teeth, to prevent the patient's biting the tongue; and if the face is turgid, pour cold water on the head. As soon as the convulsion passes off, from 5 to 10 drops of the Fl. Ext. of Gelsemium should be given, preferably hypodermically. Should this fail to afford relief the dose may be repeated every thirty minutes until the desired effects are obtained, or until three doses have been given.

If the paroxysms are preceded by premonitory symptoms, the patient should carry a vial of the Nitrite of Amyl in the pocket, and when these are felt from 3 to 5 drops of it should be dropped on a handkerchief and inhaled. A few whiffs of Chloroform answers the same purpose.

With a view of making a permanent cure determine the cause, if possible, and remove it; keep the bowels and kidneys in a normal condition and administer 20 grains of the Bromide of Potash, or the same amount of the Bromide of Ammonium, three times a day; or if the patient is syphilitic the following will answer a better purpose:

Bromide of Potash,.....	2 ounces,
Iodide of Potash,.....	1 ounce,
Water, sufficient to make,.....	6 ounces.

Mix and give a teaspoonful three times a day after meals.

Where the patient is weak and anæmic, the following should be given instead of the foregoing:

Sulphate of Strychnine,.....	1 grain,
Hydrochloric Acid,.....	4 drops,
Water,.....	4 ounces.

Mix and give a teaspoonful before each regular meal.

Whichever of the foregoing remedies are beneficial in any particular case, the permanency of the relief can only be maintained by the continuation of the drug for at least two years after the last attack. The disease, in the great majority of cases, is incurable, therefore the

“never-failing” remedy advertised by dishonest quacks should be avoided.

HYSTERIA.

Hysteria, or hysterics, is a functional disorder of the nervous system, of the nature of which it is impossible to speak definitely; characterized by disturbance of the will, reason, imagination and the emotions, as well as motor and sensory disturbance.

The predisposing cause of hysteria is a peculiar condition of the nervous system, either inherited or acquired, the peculiar manifestations being excited by disturbance of either the sexual organs, the digestive, circulatory, or nervous system. The disease is confined almost exclusively to women.

SYMPTOMS: “The subject of hysteria usually complains of a feeling of oppression, anxiety and uneasiness. At one time she seems exceedingly joyous and laughs inordinately; and at another, she will cry without the slightest occasion, and will seem weighed down with sadness. A feeling as if a ball or lump, in the throat, is frequently present, which the patient says she can neither get up nor down; the limbs are stiff and painful; there are noises in the ears; confusion of the mind and dizziness come on; and finally a temporary loss of consciousness takes place, during which short intervals of quiet are followed by violent muscular contractions, throwing around of the arms and legs, pulling the hair, and grinding the teeth.

"During these attacks the patient will struggle with her friends or attendants, will use abusive language, and will scream, laugh, and cry in rapid succession. During such an attack the heart palpitates violently, the face becomes flushed and swollen, and the breathing is difficult."

"These attacks may pass off in a few minutes, or may continue for several hours or even days. The excitement passes over, and the patient falls asleep, and when she awakens consciousness is restored."

"In some cases she gradually comes to herself without sleep. After a severe attack she feels weak and sore for several days."

"In mild cases, periods of excitement, followed suddenly by mental depression, may occur without the convulsions. The lump is felt in the throat, and the patient imagines she is suffering from a great variety of diseases. She can not sew, write, read or walk, without great fatigue, and she soon loses her appetite and becomes pale and thin."—Gunn.

TREATMENT: Little, as a rule, need be done to check the convulsions unless they are violent or prolonged, in such cases, administer from 5 to 10-drop doses of the Fl. Ext. of Gelsemium, preferably hypodermically, every half-hour until relief is obtained, or double vision or drooping of the eyelids is produced. One dose is usually all that is required.

Hysterical patients frequently complain of a smothering sensation. In these cases, 20 to 30 drops of the Aro-

matic Spirits of Ammonia, given in a sup of water, every thirty minutes, usually affords prompt relief.

If the bowels are constipated regulate them with the Fl. Ext. of Cascara Sagrada; if the patient is afflicted with any "female trouble," it should receive proper treatment.

When the patient is debilitated the following should be given:

Fl. Ext. of Nux Vomica,.....	3 drachms,
Fl. Ext. of Hydrastis Can.,.....	1 ounce,
Fl. Ext. of Gentian,.....	3 ounces,
Fowler's Solution of Arsenic,...	1½ drachms,
Aromatic Elixir, sufficient to make,	.6 ounces.

Mix and give a teaspoonful before each regular meal.

Pulsatilla is a valuable remedy in these cases, especially where there is nervousness with depression of spirits. The Fl. Ext. of it may be given in from 3 to 5-drop doses three times a day.

Regular habits and the avoidance of all excitement must be enjoined.

TETANUS.

LOCK-JAW.

Tetanus is an acute infectious disease; characterized by persisting rigidity of the muscles of the jaws and neck, and frequently of the greater part of the voluntary muscles of the body, with paroxysms of tonic spasms, the intellect remaining unimpaired.

It is said to be idiopathic when no open wound is discoverable; traumatic, when following a wound; and tetanus neonatorum when occurring in the new-born.

It is caused by the tetanus bacillus, which gains access to the system through some wound, usually a punctured wound of the extremities. Many recent writers claim that the disease is never idiopathic, however, they admit that the wound may be so trivial as to entirely escape notice. The bacilli are found everywhere, but most numerous in barn-yards, gardens, rubbish and putrefying liquids.

SYMPTOMS: "Sometimes tetanus comes on suddenly and with great violence; but more generally it occurs gradually, differing greatly in various cases, both in severity of its symptoms, and in the manner of the attack. Usually, the first symptom is a slight sensation of stiffness in the back part of the neck, which increases, rendering any motion of the head both difficult and painful, with an uneasy sensation at the root of the tongue, and difficulty in swallowing. A great tightness about the chest, and a severe pain at the lower part of the breast-bone, shooting into the back, are also present. The spasms of the neck become more violent, the jaws gradually become stiff with the teeth closely set together; spasms at the pit of the stomach and of the muscles of the abdomen take place, the abdomen feels very hard, the body is curved in some direction, or remains rigidly erect, with obstinate constipation and excruciating pain, and finally convulsions and death. Generally, in this disease, the eyes are rigid and immovable in their sockets, the countenance is hideously distorted and manifests great distress; the pulse becomes irregular; the strength

exhausted; and there is frequently a cold, clammy perspiration. Death may be produced by suffocation, or exhaustion. When it proves fatal it is generally from the fifth to the tenth day, and the younger the patient, the more rapidly fatal it is; sometimes one universal spasm terminates life.”—King.

TREATMENT: This in the hands of the unprofessional is unsafe, therefore, the treatment is not given in this work.

PARALYSIS.

“Paralysis is a term applied to a condition in which there is a partial or complete loss of motion or sensation, or both, in some part of the body. It is not a disease, but a symptom of several diseases that affect the brain and spinal cord.”

“Paralysis may follow apoplexy, inflammation of the brain, softening of the brain-substance, the formation of tumors inside of the skull, and injuries of the head, that cause bleeding within the skull; or injuries of the spinal cord. When the paralysis is caused by any of these conditions of the brain, it usually affects one entire side of the body, and is then called hemiplegia.”

“When the spine is involved, all that part of the body below the seat of the disease or injury is paralyzed, and the condition is called paraplegia.”

“If there is any injury of, or pressure on, a large nerve supplying a limb or a single muscle, the part so supplied will be paralyzed.”

"In some cases the paralysis comes on suddenly, while in others its development is gradual. Sometimes motion is lost while sensation remains normal, again motion may be present while there is no feeling in the part; but usually both motion and sensation are destroyed."

"In some cases the skin of the back and affected side is over sensitive, to such a degree that the slightest touch will occasion great suffering."

SYMPTOMS: "Inability to speak, and loss of motion or sensation, or both, on one side, with the face drawn to the opposite side, indicate paralysis from causes originating in the brain. Loss of motion and sensation below a fixed point in the back, and entire freedom from head-symptoms indicate that the seat of the trouble is located in the spine. When only one limb or one muscle or set of muscles, is paralyzed, it indicates that a large nerve is involved."

"Whatever the cause of paralysis, when it once occurs a long time is necessary to restore the normal functions of the affected parts, and in many cases, a recovery from one attack is no protection against another."---Gunn.

TREATMENT: The physician should determine the nature of the exciting cause of paralysis, and do what he can to relieve that. The most successful treatment consists in the proper use of electricity. The alternate use of the faradic and galvanic currents will usually prove the most serviceable. The following may also be used:

Sulphate of Strychnine,.....1½ grains,

Hydrochloric Acid,.....4 drops,

Dilute Phosphoric Acid,.....1 ounce,
Glycerine,.....1 ounce,
Water, sufficient to make,.....6 ounces.

Mix and give a teaspoonful before each regular meal.

Due attention must be given to the diet, which should be of the most nutritious character. If the bowels are constipated the Fl. Ext. of Cascara Sagrada should be given three times a day until they are well regulated; and whenever the urine is scanty 20 grains of the Acetate of Potash should be given every four hours.

Attention must also be given to the skin. A tepid sponge-bath should be given every morning, and the entire body rubbed thoroughly with a coarse towel. This treatment, however, should be followed out under a physician's direction, as it may be found necessary to vary it from time to time

INFANTILE CONVULSIONS.

SPASMS.

These are violent, spasmodic, involuntary, alternate, muscular contractions and relaxations usually accompanied by loss of consciousness and followed by stupor. There are two forms of them; Clonic and Tonic. In the first, the spasmodic movements are of short duration and alternate with periods of relaxation; in the latter, there is unintermitting muscular rigidity. The first named is the form usually seen.

They may occur from a variety of causes, as organic brain diseases; a neuropathic tendency; fright, rickets,

meningitis, uræmia, dentition and worms, but the most common cause is congestion of the brain.

SYMPTOMS: These are so well known that a description is thought to be superfluous.

TREATMENT: When the head is kept cool and the feet warm during fever and the sedatives used according to indications, convulsions in children will rarely be seen except as a result of meningitis or some organic brain lesion, however, some diseases are ushered in with convulsions. When convulsions do occur, if possible, ascertain the cause and remove it.

Undoubtedly our most efficient antispasmodic is Chloroform. A few drops of it may be put on a napkin or handkerchief and held over the nose and mouth of the little sufferer. A very small amount is usually sufficient. Chloral Hydrate is also efficient in these cases. It may be given in doses of 1 grain for each year of age up to twenty, repeating the dose every thirty minutes until the convulsions are checked. The Sulphate of Morphine, given hypodermically, will control them where all other remedies fail, but the greatest of care must be exercised in its use with young children.

Where there is flushed face, bright eyes and contracted pupils large doses of the Fl. Ext. of Gelsemium should be given. The Bromides may also be used in these cases, especially the Bromide of Ammonium. It may be given in doses of 1 grain for each year of age up to twenty.

Where convulsions are a result of organic brain disease very little, towards effecting a cure, can be accomplished.

NEURALGIA.

Neuralgia is a disease of the nervous system; characterized by sharp, darting pains, without inflammation or other disorder, except that of a nerve or nerve-center involved. It may affect any of the sensitive nerves, but is usually confined to one side of the body. When it is confined to the face it is called *tic douloureux*; when to the sciatic nerve, *sciatica*; when to the side, *pleurodynia*; when to the stomach *gastrodynia*; and when to the heart, *angina pectoris*. We have already noticed some of these and will group the remainder of them together in this article.

Any thing that enfeebles the body may be the predisposing cause of an attack. The most common exciting causes are malaria, exposure to cold or damp, mental excitement or worry and decayed teeth.

SYMPTOMS: In some cases an attack commences with a slight sense of heat, or a sense of itching or numbness, which increases more or less rapidly. In others it commences suddenly, with a sharp, darting pain, which occurs from time to time at longer or shorter intervals. The pain is sometimes periodic, that is, it occurs at a certain time each day. When it commences of a morning and subsides of an evening it is sometimes called a "sun-pain." This form is particularly frequent in malarial districts.

If not relieved by treatment the disease continues; the system suffers, and the patient may finally die, worn out from the repeated shocks and nervous irritation.

TREATMENT: Require the patient to assume the recumbent position and administer from 5 to 10 drops of the Fl. Ext. of Gelsemium every hour until the pain is relieved, or until double vision, drooping of the eyelids or falling of the under jaw is produced. Bathe the affected parts freely with equal parts of Chloroform and the Fl. Ext. of Aconite or instead of this apply a cloth saturated with the White Liniment. Regulate the bowels with the Fl. Ext. of Cascara Sagrada, administered before each regular meal; and if there is scantiness of urine give 20 grains of the Acetate of Potash every four hours.

If the pain is periodic give Quinine as is recommended in intermittent fever.

With a view of making a permanent cure administer the following:

Quinidine,.....3 drachms,
 Fl. Ext. of Nux Vomica,.....3 drachms,
 Fl. Ext. of Hydrastis Can.,.....1 ounce,
 Fowler's Solution of Arsenic,.....2 drachms,
 Simple Syrup, sufficient to make,..6 ounces.

Mix and give a teaspoonful before each regular meal. Where there is no malarial complication, the Quinidine may be omitted from the prescription.

CEPHALALGIA.

HEADACHE.

Cephalalgia, literally, means pain in the head. It is one of the most common affections to which human flesh is heir. Several forms of it are recognized, as bilious, nervous, rheumatic, etc.

The usual causes of it are over-exertion, especially during warm weather; remaining in a crowded or overheated room; fermentation of the food in the stomach; constipation of the bowels; excitement; the excessive use of stimulants; missing an accustomed meal; loss of sleep; cold; biliousness, etc.

TREATMENT: Where the skin and whites of the eyes are yellow give 30 drops of the Fl. Ext. of *Chionanthus Virginica* before each regular meal.

If it results from an overloaded stomach or a fermentation of the food in this organ give 20 grains of *Powd. Ipecac.*, in a half cup of warm water.

If there is chronic indigestion adopt the treatment that is recommended for this disease.

If the bowels are constipated, treatment for their relief must be given.

To relieve a paroxysm the following is specific.

Fl. Ext. of <i>Gelsemium</i> ,.....	5 drops,
<i>Acetanilide</i> ,.....	5 grains.

Mix and give at one dose and if not easy in an hour the second dose may be given.

ODONTALGIA.

TOOTHACHE.

By odontalgia or toothache is meant a painful condition of the nerve in a tooth. It usually results from caries, by which the nerve in the tooth is exposed to air, etc., however, a very severe form of it is sometimes caused by an abscess (apical) at the root of the tooth.

TREATMENT: The following will usually afford marked relief:

Creosote,.....i drachm,
Oil of Cloves,.....i drachm,
Fl. Ext. of Aconite,.....i drachm,
Chloroform,.....i drachm.

Mix and apply to the cavity of the tooth on lint.

The pain will certainly recur, sooner or later, and may lead to severe facial neuralgia, unless the tooth is treated and filled, or extracted. Persons, who have decayed teeth should lose no time in consulting a competent dentist.

PART VIII.

MISCELLANEOUS DISEASES.

POISONOUS BITES AND STINGS.

Persons are occasionally bitten by poisonous serpents or tarantulas, especially in newly settled communities, but more commonly they are stung by the bee, wasp and hornet or others of like species.

The history of such cases is usually very plain, therefore, a mistake is rarely made.

The effects of the bite of a poisonous serpent appear within a few minutes after the patient receives the virus. There is more or less swelling of the part, sometimes of the entire limb, which may become mottled from an extravasation of blood; the pulse becomes weak and the patient extremely prostrated; the countenance pale; the extremities cold; the skin covered with a cold perspiration; the patient drowsy; and there may appear later, if the patient survive, an open sore or ulcer at the point where the virus entered.

The sting of the lizard, bee, wasp, hornet or others of like species is similar in kind but different in degree. Where there have been but one or two stings received only local symptoms usually result, consisting of considerable swelling at the point, which is pale with a red areola.

In extremely susceptible persons, a single sting may produce great prostration, but more commonly this is not seen unless the person has been stung in many places, when the depression is similar to that produced by the bite of the poisonous serpent.

When a person is bitten by an animal suffering with hydrophobia, usually the dog, fox, wolf, cat or skunk, no symptoms other than those that would be produced by a simple wound of the same extent appear until six weeks to three or four months afterwards, however, in young persons, or where the infection is great, hydrophobia may develop earlier.

Probably not half the persons bitten by rabid animals develop hydrophobia. This may be on account of the animal's teeth usually passing through clothing before entering the person's flesh and the practice of cauterizing all such wounds.

TREATMENT: Where a person is bitten by a poisonous serpent, the wound, where there are no hollow teeth or sores on the lips or in the mouth, should be thoroughly sucked at once, and a bandage applied to the limb, between the wound and the heart, in order to prevent, as much as possible, the circulation of blood in the part, thereby preventing the poison's gaining entrance to the general circulation. Where the wound is on a part that can not be applied to the mouth take a sharp knife and incise the part where the fang entered and then apply cups to the part. This is accomplished by putting a small piece of burning paper in a glass or a quinine bottle, which

has previously been moistened with water, and quickly applying the mouth, while the paper is burning, to the part in such a manner that air can not enter the vessel and the job is accomplished.

Administer 30 drops of the Fl. Ext. of Echinacea Angustifolia every two hours and keep clothes wet with the same applied to the place where the serpent's fang entered.

Where the pulse is weak give the following:

Fl. Ext. of Digitalis,.....12 drops,

Fl. Ext. of Cactus Grand.,.....24 drops,

Water,12 teaspoonfuls.

Mix and give a teaspoonful every two hours. When the pulse is extremely weak 1-40 to 1-30 of a grain of the Sulphate of Strychnine should be given every three or four hours. The Aromatic Spirits of Ammonia should also be given, at the same time, in from 20 to 30 drop doses every one, two, or three hours. Whiskey is also beneficial in these cases but it should not be given in sufficient amounts to produce drunkenness, however, owing to the depressing effect of the virus, considerably more of it may be borne than under ordinary circumstances.

Where a person has been bitten by a rabid animal the wound should be cleansed of the virus as in snake-bite and then thoroughly cauterized with Carbolic Acid. If this treatment is used at once very few cases of hydrophobia would occur in persons who had been bitten by rabid animals.

After the wound is cauterized the Echinacea should be used as in snake-bite.

SCROFULA.

Scrofula is a chronic infectious disease of the lymphatic glands; characterized usually by an enlargement and hardness of the glands of the neck.

It is caused by the tuberculosis bacillus and is most commonly seen in children.

SYMPTOMS: "The first, most common, and distinctive symptom of Scrofula, is enlargement of the lymphatic glands, especially those about the neck. These enlargements or tumors may remain in an indolent condition for a long time, neither increasing nor diminishing in size, and causing no pain nor other disagreeable symptom. Occasionally they may disappear, being removed by the powers of the system, but more generally, they gradually advance, become inflamed and painful, soften, and eventually discharge matter of a thin ichorous nature, mixed with curdy or cheese-like flakes. At first this matter is discharged from several small sinuses or openings; but eventually these combine, forming ulcers with jagged and uneven edges, which are very indolent, healing slowly and leaving unsightly scars when they do heal. They are apt to be succeeded by other tumors, which run a similar course, and the disease may continue in this manner for a number of years until it is cured, or the system is destroyed by it. The predisposition to scrofula may be transmitted from generation to generation, not manifesting itself in one generation, while

severely inflicting another; yet it is not invariably the case, that children born of scrofulous parents are affected with scrofulous diseases; for often but one child is affected while the rest of the children, to all appearance, present no symptoms of it whatever.”—King.

TREATMENT: This should be commenced by the administration of the following:

Bichloride of Mercury,..... $1\frac{1}{2}$ grains,
 Iodide of Potash,.....1 ounce,
 Water, sufficient to make,.....6 ounces.

Mix and give a teaspoonful after each regular meal.

If the patient is debilitated the following should be given:

Fl. Ext. of Nux Vomica,.....3 drachms,
 Fl. Ext. of Hydrastis Can.,.....1 ounce,
 Fl. Ext. of Gentian,.....3 ounces,
 Fowler's Solution of Arsenic,..... $1\frac{1}{2}$ drachms,
 Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful before each regular meal. Some writers recommend Cod Liver Oil in these cases, but we have never seen much, if any, good follow its use.

Where there are ulcers that have no disposition to heal, cleanse them thoroughly two or three times a day with Peroxide of Hydrogen after which wash them with a 1 to 1000 solution of Bichloride of Mercury, then, dust them well with Iodoform and cover them carefully with Bichloride Gauze.

In obstinate cases, it is better to remove the glands before suppuration is established.

Let the patient have plenty of exercise in the open air and good nutritious food.

Whatever line of treatment is adopted it must be continued, in some cases, for months, and probably years, in order to be successful.

RHEUMATISM.

Rheumatism is a disease the exact nature of which is unknown, though it is probably infectious. There are three forms of it; acute articular, chronic articular and muscular.

In former times it was thought to be caused by an excess of lactic acid in the blood, but it is now believed to be due to a microorganism, probably the bacillus of Achalme, however the predisposing causes are heredity, strains, and exposure to cold and damp. Males are more subject to it than females. One attack predisposes to another.

ACUTE ARTICULAR RHEUMATISM.

Acute articular rheumatism is characterized by fever, inflammation in and around the joints, occurring in succession and a tendency to endocarditis or pericarditis.

SYMPTOMS: An attack is usually ushered in with a chill, followed by fever, pain and stiffness of one or more joints, constipation of the bowels, scanty, high-colored acid urine and later profuse acid perspirations.

The pain soon becomes acute, boring, tearing, or gnawing; the joints tender, red, and swollen; and the slightest movement of the affected joints increases the pain until it is almost unbearable. The inflammation

subsides in the joints affected and other joints are attacked. Fever with evening exacerbations and morning remissions continues throughout the attack.

Uncomplicated cases usually recover in from two to four weeks, however, they may continue six weeks or longer. Relapses are frequent.

When the attack is mild the term subacute rheumatism has been applied to it.

An attack may be complicated with pericarditis, endocarditis, myocarditis, inflammation of the lining of the arteries of the brain, bronchitis, pneumonia, or pleurisy.

TREATMENT: Control the fever throughout the attack with sedatives administered according to indications; and if the fever is high from 3 to 5 grains of Acetanilide should be given every three or four hours, however it should be remembered that Acetanilide should not be given when the pulse is weak or irregular.

The following, in these cases, is the most efficient combination that we have had any experience with:

Salicylate of Soda (from Oil of
Wintergreen),.....1 ounce,
Fl. Ext. of Cimicifuga,.....6 drachms,
Fl. Ext. of Phytolacca Dec.,.....1½ drachms,
Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful every three hours until the pain subsides; when, it should be given four times a day until the patient fully recovers.

Pain should be controlled throughout the attack with the Sulphate of Morphine in doses of $\frac{1}{4}$ of a grain every two to four hours as is absolutely required.

If the tongue is broad and pallid, the coating consisting of a dirty, whitish material, 20 grains of the Sulphite of Soda may be given every four hours; or if the tongue is of a deep, red color, instead of the Sulphite of Soda 3 drops of Hydrochloric Acid, largely diluted with water, should be given every four hours.

When there is scantiness of urine, the following should be given:

Acetate of Potash,.....5 drachms,

Water, sufficient to make,.....2 ounces.

Mix and give a teaspoonful every three or four hours until the desired effects are obtained.

Keep the bowels open throughout the attack. For this purpose Oil or the Fl. Ext. of Cascara Sagrada may be given as is necessary.

Where the joints affected are other than the hips or shoulders they should be carefully bandaged with a roller bandage, which should be applied wet with hot water. If it is the ankle or knee that is affected commence at the toes and apply the bandage evenly, using considerable pressure, to six or eight inches above the afflicted joint; and it will be found that within twelve or eighteen hours the swelling is reduced to such an extent that the bandage is loose. When the bandage is first applied the pain is increased but this, in the course of a few hours, subsides. When the affected joint is in

the arm the bandage should commence at the fingers.

If the patient is extremely debilitated after the attack the following should be given:

Fl. Ext. of Nux Vomica,.....3 drachms,

Fl. Ext. of Hydrastis Can.,.....1 ounce,

Fl. Ext. of Gentian.....3 ounces,

Aromatic Elixir, sufficient to make, 6 ounces,

Mix and give a teaspoonful before each regular meal.

Where the joints remain sore after an attack the following should be given:

Iodide of Potash,.....1 ounce,

Fl. Ext. of Phytolacca Dec.,.....3 drachms,

Compound Syr. of Stillingia, to make, 6 ounces.

Mix and give a teaspoonful after each regular meal.

Rheumatic patients should avoid the use of alcoholic liquors and wear flannel next to the body the entire year.

CHRONIC ARTICULAR RHEUMATISM.

This is a mild but persistent inflammation of the ligaments, synovial membrane, cartilages and sometimes the capsule of the joints. It may be limited to any one of these structures, or it may invade them all at the same time.

It may be produced by the same causes that produce the acute form of the disease and may follow an acute attack. The greatest number of these cases occur between the ages of forty and sixty. Females are slightly more subject to it than males. Residing in unhygienic surroundings and exposure to cold and damp predispose to it. Its development may be favored by heredity.

SYMPTOMS: Unlike the preceding form of the disease in this there is usually no fever, the principal symptoms being a deep, aching pain with only very slight, if any, swelling and more or less tenderness in one or more of the joints, usually the larger ones. Persons with rheumatic joints are generally great weather prophets, often being able to foretell the coming of a storm, or a change in the weather. After rest motion gives considerable pain, but after exercise the joint becomes more supple and less painful. The pain is limited to the joints affected and does not change from one to another.

The disease undergoes exacerbations and remissions and may continue for years without causing much deformity or crippling of the joints. The muscles near the affected joints finally become atrophied, thus causing the joints to look larger than they really are. The joints are more or less stiffened, and when moved a creaking noise may usually be heard.

TREATMENT: When the joints are swollen and very painful, the treatment recommended in the acute variety of the disease should be given until the pain and swelling subside to some extent, however, sedatives must not be given unless the patient has fever.

With a view of making a permanent cure the following should be given:

Iodide of Potash,.....	1 ounce,
Fl. Ext. of Cimicifuga,.....	1½ ounces,
Fl. Ext. of Phytolacca Dec.,.....	3 drachms,

Fl. Ext. of Colchicum Seed, $2\frac{1}{2}$ drachms,
Compound Syr. of Stillingia, to make, 6 ounces.

Mix and give a teaspoonful after each regular meal. If it acts too freely on the bowels decrease the amount of Colchicum.

Apply the White Liniment freely to the affected joints, using considerable friction in applying it. Give the patient a general bath in water as hot as can be borne, in a warm room at least three times a week. If the bowels are constipated regulate them with the Fl. Ext. of Cascara Sagrada. If there is scantiness of urine give 20 grains of the Acetate of Potash every four hours as is required.

The diet of persons afflicted with chronic rheumatism must be highly nutritious, but non-stimulating. They should wear flannel next to the skin the entire year, and avoid exposure to sudden changes in the atmosphere and cold and damp.

MUSCULAR RHEUMATISM.

This is a rheumatic affection of the voluntary muscles, accompanied by pain, tenderness, and stiffness of the affected muscles, but by no other evidences of inflammation. It may affect any or all of the voluntary muscles, but the ones most commonly affected are those of the back and neck.

It is a disease of adult life, however, it is occasionally seen in children of the gouty or rheumatic. It is often intimately associated with articular rheumatism, which sometimes precedes or follows it. The same cause that

produces acute articular rheumatism probably produces this form of the disease. The sudden straining of a muscle predisposes to an attack.

SYMPTOMS: "An attack usually comes on suddenly with severe, deep-seated pain in the group of muscles affected. The pain is of a stretching or tearing character, increased by movements or pressure. It is always more severe at night, and remits, or disappears during the day. It may be migrating, or remain fixed in certain muscles. It is usually acute when the muscle is in action, and dull when the parts are at rest. Certain positions mitigate the pain. In many instances it will wholly disappear in a few minutes, and the sufferer, who, perhaps, has been for hours enduring excruciating, cramp-like pain, feels a sudden sense of relief. In some cases there is fever. Such attacks are followed by lassitude."—Loomis.

When the muscles of the back are affected, it is called lumbago. In this the patient is unable to bend backwards or forwards, and if the pain comes on while he is in a sitting posture, he is compelled to walk with the body bent at the hips.

When the muscles of the neck are affected, it is called torticollis or wry-neck. In this the head is usually drawn to one side, and the patient is unable to turn it without turning the body.

When it is situated in the thoracic muscles it is called pleurodynia and may be mistaken for pleurisy or intercostal neuralgia.

TREATMENT: Require the patient to remain quiet in bed and administer the following:

Salicylate of Soda (From Oil of
Wintergreen),..... $2\frac{1}{2}$ drachms,
Fl. Ext. of Cimicifuga,..... 2 drachms,
Fl. Ext. of Phytolacca Dec.,..... $\frac{1}{2}$ drachm,
Aromatic Elixir, sufficient to make, 2 ounces.

Mix and give a teaspoonful every three or four hours until relieved. Bathe the affected parts freely with the White Liniment; or apply cloths wrung out of hot water, changing them frequently. Do not allow the bowels to become constipated; and if there is scantiness of urine give 20 grains of the Acetate of Potash every four hours. If there is fever control it with sedatives administered according to indications.

GOUT.

Gout is a constitutional disease in which there is an excess of uric acid in the blood; characterized by the sudden occurrence of severe pain, and swelling in one of the smaller joints, usually the great toe, with the deposit of the urate of soda in the structure of the joint. There are two varieties of the disease; the acute and the chronic.

The predisposing cause of it is an inherited tendency. The exciting causes are the excessive use of wine and malt liquors, and high living with indolent habits.

SYMPTOMS: An attack, though usually preceded for a few days by indigestion, lassitude, headache, and constipation, commences with a burning, tearing pain in the ball of the great toe, which becomes red, hot,

swollen, and so sensitive that the slightest touch produces intense pain. Associated with the pain is a chill, followed by more or less fever, a quickened pulse, thirst, and scanty, high-colored, acid urine, which, on cooling, deposits a heavy, brick-dust sediment.

Towards daylight the symptoms ameliorate, but return again at night. The disease continues in this manner, though, gradually becoming milder, until about the fourth or fifth day, when, convalescence is established, the patient, as a rule, feeling better than he did before the attack.

An individual may have only one attack, but usually a second one supervenes within a year. Gradually the attacks approach each other, and become more prolonged, though, less severe, until a condition of chronic gout is reached. Deposits now occur, the affected joints becoming hard, knotted, and often greatly distorted.

TREATMENT: For the acute paroxysms the following should be given:

Salicylate of Soda (From Oil of
Wintergreen),.....5 drachms,
Fl. Ext. of Colchicum Seed,.....1 drachm,
Aromatic Elixir, sufficient to make, 4 ounces.

Mix and give a teaspoonful every three hours until the pain is relieved, when, it should be given four times a day.

Fever, when present, should be controlled with sedatives administered according to indications; and if

the bowels are constipated Oil, Salts or a Seidlitz Powder should be given as is required.

The pain, when severe should be controlled with $\frac{1}{4}$ grain doses of the Sulphate of Morphine, preferably, hypodermically.

Hot poultices or cloths wrung out of hot water may be applied to the painful part.

In lingering cases of chronic gout use the following:

Iodide of Potash,.....1 ounce,

Fl. Ext. of Colchicum Seed,..... $2\frac{1}{2}$ drachms,

Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful after each regular meal.

Where the case becomes chronic from 1 to 2 drachms of the Effervescent Citrate of Lithium should be given, in half a glass of water, three or four times a day.

The diet of persons afflicted with gout should consist, principally, of vegetables, and fruits, however, tomatoes and strawberries should be avoided. Fresh meat may be used once a day, as may oysters, fish, and soups. Alcoholic and malt liquors must positively be prohibited.

Flannel should be worn next to the body throughout the year, and the skin, kidneys and bowels must be kept in a normal condition.

Moderate exercise in the open air when the weather is suitable is very beneficial.

URTICARIA.

NETTLE RASH.

Urticaria is an inflammation of the skin; characterized by the appearance of an eruption like the elevations

produced on the skin by the sting of a nettle, accompanied by intense itching and sometimes slight fever.

The most common causes of it are derangements of the stomach and bowels; pregnancy; the effects of certain drugs; malaria; exposure to heat; and the "change of life."

SYMPTOMS: It is such a common affection that it is thought a description of it would be superfluous.

TREATMENT: The Hydrate of Chloral is almost a specific for nettle rash. It may be given in 10-grain doses every half-hour until it produces quietude or until three or four doses have been given. If fever is present, control it with sedatives administered according to indications, in this as in any other disease. If the bowels are constipated give a full dose of Salts.

The Salicylate of Soda in from 3 to 5-grain doses every three hours also acts well in these cases.

As a local application the following may be used:

Carbolic Acid,..... $1\frac{1}{2}$ drachms,

Glycerine,..... $\frac{1}{2}$ ounce,

Alcohol,.....4 ounces,

Camphor-Water, sufficient to make,...1 pint.

Mix and apply to the parts affected with a sponge two or three times a day.

ECZEMA.

TETTER; SALT RHEUM.

Eczema is either an acute or chronic inflammation of the skin; characterized by redness, the formation of papules, vesicles or pustules, followed by a serous exuda-

tion and the formation of crusts and intense itching or burning.

There are more than a dozen varieties of eczema, but we will have to content ourselves by giving a general description of it.

The causes of it are very obscure; but it is probably the result of an inherited predisposition in many cases. The writer believes it to be caused by a microorganism.

SYMPTOMS: "Eczema is the most common of all cutaneous affections, with symptoms varying in accordance with the particular variety of the affection and its location, although, the general characteristics of a catarrhal inflammation are present in all; these are redness, either limited or diffused; heat, of the part affected; swelling, the result of serous exudation, giving rise either to a discharge (weeping), with subsequent crusting, or to the deposition of plastic material. The most constant, annoying, and troublesome symptom is the itching, or at times burning, which varies from that which is simply annoying to that which is almost unendurable."

"Eczema runs its course either as an acute affection, lasting a few weeks, not to return, or to return acutely at wide intervals, or, as is much more frequently the case, it assumes a chronic state, continuing with more or less variations for months, years, or even a lifetime. It may appear upon any portion of the body, or involve the whole integument (eczema universale). "---Hughes.

TREATMENT: Regulate the bowels and kidneys and use the following:

Bichloride of Mercury,..... $2\frac{1}{2}$ grains,
 Acetic Acid,.....I drachm,
 Glycerine,.....I drachm,
 Tr. of Cantharides, sufficient to make, I ounce.

Mix and apply each night. After the first ounce is used the Bichloride of Mercury may be increased to 5 grains to the ounce; and, as the patient becomes accustomed to its use, it may be increased, as the patient can bear it, to even 20 grains to the ounce.

In eczema of the palms of the hands the treatment should be commenced with 20 grains to the ounce, thus:

Bichloride of Mercury,.....20 grains,
 Acetic Acid,.....I drachm,
 Glycerine,.....I drachm,
 Tr. of Cantharides, sufficient to make, I ounce.

Mix and apply thoroughly to the palms each night before going to bed.

The writer has been very successful in the management of eczema with this plan of treatment.

TINEA CIRCINATA.

RING-WORM.

Ring-worm is a contagious affection of the skin, caused by the presence of a vegetable parasite, the trichophyton, discovered by Bazin, in 1854.

It is so common that a description of it is thought to be unnecessary.

TREATMENT: The same as that recommended for eczema. The application of the Tr. of Iodine is efficient, so also is the Tr. of Veratrum Viride.

HERPES ZOSTER.

SHINGLES.

Shingles is an acute inflammatory disease; characterized by groups of vesicles upon an inflamed base, situated over the course of a nerve, and usually accompanied by considerable pain. Its most common seat is over the intercostal nerves.

It is due to an inflammation of the nerve-ganglia or the nerve trunks, and branches. The causes producing this condition are very obscure, but it is generally believed to result from cold, injuries to the nerves, anæmia, and the medicinal use of arsenic.

SYMPTOMS: An attack usually commences with neuralgic pains of a sharp or burning character with more or less fever and constipation, followed by the appearance of papules, which soon become vesicles. The pain and eruption is usually confined to one side of the body but may extend to both sides. The vesicles are about the size of a pin-head, sometimes larger and are situated on a red and highly inflamed base. From the fifth to the tenth day, rarely longer, the blisters dry up, leaving brownish crusts which drop off in a few days leaving scars; and these are sometimes permanent.

TREATMENT: Control the fever with sedatives administered according to indications; keep the bowels slightly open throughout the attack with Salts; and coat the "shingles" with Collodion.

If the pain is very severe, it may be relieved with $\frac{1}{4}$ -grain doses of Morphine.

FURUNCLE.

BOIL.

A circumscribed, painful inflammation of the skin and underlying tissue, beginning in a cutaneous gland, terminating in suppuration and the formation of a firm central slough or "core."

They are caused by a pus-producing microorganism, which gains entrance through the hair follicles. The predisposing causes are general debility, anæmia, diabetes, uræmia, friction or injuries, uncleanliness, contact with certain irritants, etc.

They may occur singly or in crops of two, three or more; other crops frequently following their disappearance.

TREATMENT: A boil in its early stage, may sometimes be aborted by the use of the following:

Tr. of Aconite Root,..... $2\frac{1}{2}$ drachms,

Tr. of Opium,..... $2\frac{1}{2}$ drachms,

Tr. of Arnica,..... $2\frac{1}{2}$ drachms.

Mix and apply frequently or keep the part wet with it. Should this fail to abort it hot poultices should be used until pus is formed, when a free incision must be made, to give it exit. Vaseline should now be applied, on a soft cloth, for two or three days, to prevent the place of exit from closing.

When a person is afflicted with successive crops of boils, relief may usually be obtained from the following:

Iodide of Potash,.....1 ounce,

Compound Syr. of Stillingia, to make, 6 ounces.

Mix and give a teaspoonful after each regular meal. Should this fail $\frac{1}{8}$ of a grain of the Sulphide of Calcium may be given four times a day.

If the patient is debilitated or anæmic give the following:

Fl. Ext. of Nux Vomica,.....3 drachms,

Fl. Ext. of Hydrastis Can.,.....1 ounce,

Fl. Ext. of Gentian,.....3 ounces,

Aromatic Elixir, sufficient to make, 6 ounces.

Mix and give a teaspoonful before each regular meal.

ANTHRAX.

CARBUNCLE.

A hardened, gangrenous, deep-seated, more or less circumscribed, painful inflammation of the skin and subcutaneous cellular tissue terminating in sloughing and the subsequent formation of a permanent cicatrix.

It is caused by a microorganism, the anthrax bacillus. The middle-aged and elderly persons are more subject to it than others. Men are more frequently attacked than women.

SYMPTOMS: "Carbuncle is recognized by its peculiar form; commencing in the lower layers of the cutaneous tissue; it first resembles somewhat a phlegmon minus its bright redness. At first, it is somewhat rounded, with a strong tendency to the production of vesicles on its surface; soon, however, becoming firm, circular, and flat, and raised above the surrounding parts, spreading through the subcutaneous tissue and skin, becoming at times enormously large, and having a dark, red or violaceous

color. As the disease progresses, the pressure results in the softening of the tissue, the skin becoming gangrenous, breaking down at numerous points, forming perforations, through which centers of suppuration appear in different stages of advancement, either as whitish, fibrous plugs, or as cavities, from which a yellowish, sanious fluid oozes, the surface of the anthrax having a cribriform appearance, perforated like a sieve. The entire mass terminates in a slough, which, on being detached, leaves a large, open, deep ulcer, with firm, everted edges, granulating slowly, a permanent cicatrix marking the site of the lesion. The development of the carbuncle is attended with severe pain, of a deep, throbbing and burning character."

"The constitutional symptoms vary with the size, number, and severity of the disease; loss of appetite, coated tongue, general malaise, and moderate febrile reaction accompany all cases, to which are added those of septicæmia in severe cases."

"The duration is from two to six weeks. Its favorite site is the back of the neck, shoulders, back, and buttocks. It is usually single."---Hughes.

TREATMENT: As soon as its nature is discovered, Caustic Potash should be applied to the carbuncle until an eschar is fully formed; or several small punctures may be made with a bistoury, and small pieces of the Caustic Potash inserted well into the diseased tissue. If openings have already formed, the Potash may be inserted into them and allowed to remain until it is dissolved. Subse-

quently the sore should be thoroughly cleansed two or three times a day with Peroxide of Hydrogen and then dressed with dry Iodoform, the sore being well covered with Bichloride Gauze.

Fever, when present should be controlled with sedatives administered according to indications. If the fever assumes a typhoid type treat it as such. Where the patient becomes weak stimulants should be given as is required. In the absence of fever a good tonic should be given if the patient is debilitated.

WHITLOW OR FELON.

Whitlow, or felon, is a suppurating inflammation of a finger, or, rarely a toe. Its usual location is at the end of a finger. The inflammation may commence in the membrane covering the bone, or in any tissue between this membrane and the skin.

It is caused by a pus-producing microorganism. The predisposing cause is a wound, as a bruise, splinter, etc.

SYMPTOMS: The first symptom is a slight burning pain in the finger, resembling that produced by the presence of a small briar. As the disease progresses, the part becomes swollen, the pain increases, is throbbing in character, and almost unbearable. In the course of from five to ten days suppuration takes place.

When the inflammation begins in or near the periosteum, unless proper treatment is adopted, the first joint of the bone is apt to be lost.

TREATMENT: By adopting the following treatment as soon as the nature of the affection is detected a felon may

be invariably aborted: Examine the finger carefully, to determine the most sensitive place; and, when it is found, insert, at that place, the point of a narrow-bladed knife down to the bone, then, introduce one end of a small piece of Iodoform-Gauze to the bottom of the wound and allow it to remain thirty-six or forty-eight hours, when, it should be removed and the wound dressed with dry Iodoform. The cure is now complete, except the healing of the wound, which should not, in any case, exceed one-fourth of an inch in length. This treatment gives much better satisfaction than the old method of poulticing, which is now abandoned by our leading surgeons.

SCABIES.

ITCH.

Scabies, or itch, is a contagious affection of the skin.

It is caused by the presence of an animal parasite, *acarus* or *sarcoptes scabiei*. The affection occurs at all ages and in all classes.

Almost every one is familiar with the affection, therefore, no description of it is given.

TREATMENT: We have never known the following treatment to fail to promptly effect a permanent cure:

Liquid Styra^x,.....2 ounces,

Olive Oil, sufficient to make,.....6 ounces.

Mix and apply to the affected part each night, after washing thoroughly with soft soap and warm water.

VERRUCA.

WART.

A wart is a circumscribed hypertrophy of the papillary structure of the skin. Their cause is unknown.

These growths are usually innocent, but may degenerate into cancer.

TREATMENT: The following is very efficient:

Chromic Acid,.....1 drachm,

Water,.....1 drachm.

Mix and apply to each wart with a glass rod or hard stick of wood. This turns the wart black, and in a few days the whole, or a part, of it drops off. If part of it remains another application of the remedy should be used. Any of the stronger acids, when used in this manner, will remove warts.

The Tr. of Thuja applied to a wart two or three times a day will sometimes remove it.

The following is highly recommended for the removal of warts:

Sublimed Sulphur,.....5 drachms,

Concentrated Acetic Acid,.....2½ drachms,

Glycerine, sufficient to make,.....3 ounces.

Mix and apply to the wart with a brush or on a small cloth, each night, washing it off in the morning. The wart will turn blue, shrivel, and drop off.

CLAVUS.

CORN.

A corn is a small, circumscribed, usually flat, deep-seated hypertrophy of the skin of the foot. There are two

varieties; the hard, and the soft. The latter may become inflamed. The former is not painful only under decided pressure.

It is caused by continued pressure or friction of tight, or ill-fitting boots or shoes.

TREATMENT: Bathe the foot in warm water twenty minutes, then, apply a mush poultice and let it remain during the night. This will soften the corn and permit of its ready removal with a knife.

To remove a soft corn apply Carbolic Acid to it with a soft, pine stick. A few such applications will remove the corn entire.

The following is also said to be efficient:

Extract of Cannabis Indica,	3 grains,
Salicylic Acid,	30 grains,
Oil of Turpentine,	15 drops,
Glacial Acetic Acid,	6 drops,
Hydrochlorate of Cocaine,	6 grains,
Collodion, sufficient to make,	5 drachms.

Mix and apply a thin coating over the corn each night, putting each coating on top of the preceding one, until the corn drops out.

OTALGIA.

EAR-ACHE.

Otalgia, or ear-ache, literally means pain in the ear. It is a disease of frequent occurrence, especially in children. The affection may be either of a neuralgic or an inflammatory character.

The presence of foreign bodies in the ear, and exposure to cold and damp are its principal causes.

TREATMENT: Apply warm poultices to the ear; or if this fails to afford relief use the following:

Olive Oil,.....1 drachm,

Laudanum,.....1 drachm.

Mix and after warming it drop three or four drops into the ear. The common practice of blowing tobacco smoke into the ear is beneficial. Should these means fail to give relief the Sulphate of Morphine may be given.

OTORRHŒA.

Otorrhœa, or running from the ear, is a purulent discharge from this organ, usually due to a suppurative inflammation of the middle ear, the discharge escaping through a perforation in the drum membrane.

Its most common causes are inflammation and ulceration. Those of a scrofulous diathesis are more subject to it than others.

TREATMENT: Syringe the ear very carefully two or three times a day with warm water and Castile Soap, and after thoroughly drying the cavity fill it with powdered Boracic Acid. This may be accomplished by putting a small amount of the powder in the end of a quill and placing the quill in the ear and giving it a slight puff with the lips only partially closed.

BURNS AND SCALDS.

These differ from each other only in the character of the heat producing them. When half of the body is burned or scalded sufficiently to arrest the function of

the skin over that extent of surface, death is usually the result. When a burn is extensive, the shock to the system is severe; the pulse becomes quick and weak and the body cold. In very severe cases the patient passes into a stupor and soon expires.

TREATMENT: Carefully remove the clothing from the part, and empty any blisters that may be present by puncturing them with a needle. Apply soft cloths, saturated with a solution of Bicarbonate of Soda, containing 1 ounce to the pint of water. If the pain is severe and the pulse weak administer $\frac{1}{4}$ of a grain of the Sulphate of Morphine, preferably hypodermically. As soon as the pain subsides to some extent dress the burned surface with the following:

Carbolic Acid,.....	1 $\frac{1}{2}$ drachms,
Lime-Water,.....	8 ounces,
Olive Oil,.....	8 ounces.

Mix and apply on soft linen cloths, or:

Carbolic Acid,.....	1 $\frac{1}{2}$ drachms,
Balsam of Fir,.....	2 ounces,
Olive Oil, sufficient to make,.....	6 ounces.

Mix and use as a dressing twice a day. If the surface is covered with pus it should be removed with Peroxide of Hydrogen before applying the dressing.

The following also makes an excellent dressing for burns:

Gum Camphor,.....	$\frac{1}{2}$ ounce,
Carbolic Acid,.....	$\frac{1}{2}$ ounce,
Alcohol,.....	$\frac{1}{2}$ ounce,

Glycerine,..... $\frac{1}{4}$ ounce,

Olive Oil, sufficient to make,..... 1 pint.

Mix and use as the preceding.

When the pulse is weak stimulants such as Whiskey, Aromatic Spirits of Ammonia, and the Sulphate of Strychnine should be used.

Regulate the bowels with the Fl. Ext. of Cascara Sagrada, and if the patient has fever control it with sedatives administered according to indications. Should symptoms of septicæmia occur appropriate treatment for this condition must be adopted.

INCISED WOUNDS.

CUTS.

The first thing that demands our attention in this class of wounds, is the hemorrhage, which, when a considerable sized artery, or vein, is severed, can only be permanently controlled by grasping the end of the divided vessel with a pair of artery forceps and applying a ligature around it. The hemorrhage from small arteries and veins may be controlled by simply grasping their divided ends with the artery forceps and twisting them. Of course, the unprofessional are not supposed to be prepared for such emergencies, therefore, we will give directions for controlling hemorrhage, temporarily, until the services of a surgeon can be obtained. If the bleeding vessel is an artery, and this may be known by the blood's being of a bright-red or scarlet color and flowing in jets or spurts, tie a bandage around the limb between the wound and the heart and draw it sufficiently

tight to check the hemorrhage; or if it is a vein, and this may be known by the blood's being of a dark-red, or purple color, and flowing in a continuous stream, tie a bandage around the limb, between the wound and extremity, drawing it sufficiently tight to check the hemorrhage.

After the hemorrhage is permanently controlled, the following should be used:

Bichloride of Mercury,..... $7\frac{1}{2}$ grains,
 Citric Acid,..... 4 grains,
 Water, recently boiled,..... 1 quart.

Mix and irrigate the wound thoroughly, then, dust it with Iodoform and close the wound with sutures or adhesive strips, after which, dust with the Iodoform and then carefully cover with Bichloride Gauze, and on top of this place plenty of absorbent cotton and then carefully bandage. Do not remove the dressing for several days unless the wound becomes swollen or painful. If pus appears in the wound cleanse it with Peroxide of Hydrogen and dress as above, beginning with the Bichloride wash.

CONJUNCTIVITIS.

"COMMON SORE EYES."

This is an inflammation of the conjunctiva, a delicate membrane lining the eyelids and covering part of the eye-balls, either of an acute or chronic character. When chronic there may be more or less granulation of the lids, especially in those of a scrofulous diathesis.

The usual causes of "common sore eyes" are slight injuries to the eyes; contact with some foreign body;

exposure of the eyes to dust; strong vapors; smoke; or very cold wind, etc., etc.

TREATMENT: In acute cases, require the patient to remain in-doors; keep the bowels slightly open with Salts; and use the following:

Boracic Acid,.....10 grains,
Rose-Water,.....1 ounce.

Mix and use as an eye-water every two or three hours. or:

Sulphate of Zinc,.....1½ grains,
Sulphate of Morphine,.....2 grains,
Rose-Water,.....1 ounce.

Mix and use as the preceding, or:

Sulphate of Zinc,.....1½ grains,
Acetate of Lead,.....2 grains,
Sulphate of Morphine,.....2 grains,
Rose-Water,.....1 ounce.

Mix and use as the preceding, or:

Sulphate of Cadmium,.....1 grain,
Sulphate of Morphine,.....2 grains,
Rose-Water,.....1 ounce.

Mix and use as the preceding. All these formulas make good eye-waters, however, for general use the first named is probably the most efficient.

In chronic cases, in addition to the use of one of the foregoing eye-waters, the treatment recommended for scrofula should be given; and if the lids are granulated they must be penciled two or three times a week with Blue Stone.

The wash containing the Sulphate of Cadmium is said to be efficient in removing spots from the eyes.

PART IX.

DISEASES OF WOMEN INCLUDING DIRECTIONS FOR THE MANAGEMENT OF NATURAL LABOR, ETC.

Females are subject to numerous diseases peculiar to their sex, but we shall confine ourselves principally to those that may be successfully treated without the aid of a physician.

MENSTRUATION.

Menstruation is a function, which is usually established between the twelfth and fifteenth years of age, and recurs, except when interrupted by pregnancy or disease about every twenty-eight days until the female reaches the age of about forty-five years. The first appearance of the menses or monthly sickness is usually preceded by the discharge of a whitish fluid from the vagina; by nervous excitement and vague pains and heaviness in the loins and thighs; numbness of the limbs, tumefaction of the breasts, etc. More or less indisposition and irritability precede each return of the flow. In temperate climates each period usually continues from three to six days; and the quantity of blood lost varies from three to eight ounces. The appearance of the menstrual discharge is usually

indicative of the maturity of the female, and her capability of becoming a mother; while its cessation manifests a loss of such capability.

Menstruation is supposed to result from a congestion of the womb, which always attends the escape of the ova or eggs, from the ovaries.

Mothers should inform their daughters of this change before it takes place, and also caution them against exposure to cold, damp, excessive heat, etc. Many serious troubles arise on account of a neglect of this important duty by mothers.

The departures from healthy menstruation are numerous, though the most important of these are amenorrhœa, dysmenorrhœa, and menorrhagia.

AMENORRHŒA.

ABSENT OR SUPPRESSED MENSTRUATION.

By amenorrhœa is meant the non-appearance of the menses at the age of puberty, or its suppression after it has once occurred. In weak and debilitated girls, or those who are undeveloped, no special symptoms are present to indicate menstrual derangement. Well-developed, full-blooded girls, where their menses do not appear at the proper age, suffer from headache, a sense of fullness in the head, and have more or less pain in the lower part of the bowels and in the back. Cases occasionally occur where there are "bearing-down" sensations resembling the first pains of labor.

Suppression of the menses may occur suddenly, as a result of cold taken during the menstrual period, from

getting the feet or body wet; sitting on the damp ground; cold applied to the vulva; exposure to excessive heat; severe mental emotions just preceding or during the menstrual flow; sexual intercourse during menstruation; and from fever, or other acute diseases commencing at the time of the periods, or the suppression may come on gradually, as a sequence of any chronic disease, which produces debility of the general system. Sudden suppression is attended by symptoms similiar to those seen in the full-blooded, as a result of the non-appearance of the menses, only it is often accompanied by marked fever. The habitual use of Opium or Morphine is usually attended by a suppression of the menses. In these cases the patient has the characteristic appearance of the "opium-eater."

TREATMENT: In all cases of absent menstruation, where the general health is unimpaired, no treatment whatever should be employed; it is only where the health suffers, in these cases, that the aid of medicine is required. The health of many females has been ruined for life by the injudicious use of remedies to force the menstrual flow.

If the patient is weak and debilitated the treatment must be directed towards toning up the general system, and increasing the quality and quantity of blood. For this purpose we possess nothing more efficient than the following:

Fl. Ext. of Nux Vomica,.....3 drachms,

Fl. Ext. of Hydrastis Can.,1 ounce,

Fl. Ext. of *Cimicifuga*,.....1½ ounces,
 Fl. Ext. of *Pulsatilla*,.....3 drachms,
 Aromatic Elixir, sufficient to make,..6 ounces.

Mix and give a teaspoonful before each regular meal. If the bowels are constipated they should be well regulated with the Fl. Ext. of *Cascara Sagrada*. The patient should take moderate exercise each day in the open air.

Some females never menstruate on account of a malformation of the parts, such as the absence of the ovaries, etc.; while in others, the discharge does not make its appearance on account of an imperforate hymen. Of course, the first-named condition is not amenable to treatment, but the latter may be relieved by making a small incision through the hymen.

When amenorrhœa occurs as a result of exposure, or other imprudence, require the patient to take a warm sitz-bath each night just before and during the time the catamenia should have occurred; and also administer from 5 to 10 drops of the Oil of Pennyroyal immediately after each bath is taken. Should these means fail, from 30 to 45 drops of the Fl. Ext. of *Gossypium* may be given every four hours. The following is also efficient in these cases:

Fl. Ext. of *Pulsatilla*,.....3 drachms,
 Fl. Ext. of *Cimicifuga*,.....1½ ounces,
 Fl. Ext. of *Caulophyllum*,.....1½ ounces,
 Aromatic Elixir, sufficient to make, 6 ounces.

Mix and give a teaspoonful three times a day before meals.

Should fever occur control it with sedatives administered according to indications.

DYSMENORRHŒA.

PAINFUL MENSTRUATION.

Where the menstrual flow is preceded or attended by severe pain, the condition is known as dysmenorrhœa, or painful menstruation. The pain is usually caused by the retention of the discharge in the womb, and the efforts of nature to expel it. It may be due to ante flexion, retroflexion, congestion of the neck of the womb, or an abnormal constriction of the mouth of the womb, either one of which prevents the ready passage of the menstrual discharge.

TREATMENT: If the bowels are constipated administer from 10 to 30 drops of the Fl. Ext. of Cascara Sagrada before each regular meal, either increasing or diminishing the dose according to its effects on the bowels. For the purpose of relieving the pain during the periods from 2 to 5 drops of the Fl. Ext. of Gelsemium should be given every hour or so until easy.

With a view of making a permanent cure the following may be tried:

Fl. Ext. of Phytolacca Dec.,..... $2\frac{1}{2}$ drachms,
Fl. Ext. of Cimicifuga,..... $1\frac{1}{2}$ ounces,
Fl. Ext. of Pulsatilla,.....3 drachms,
Fl. Ext. of Gelsemium,.....3 drachms,
Aromatic Elixir, sufficient to make, 6 ounces.

Mix and give a teaspoonful three times a day, before meals. This should be used for three or four months.

Should it finally fail to afford relief, a competent physician should be consulted.

MENORRHAGIA.

PROFUSE MENSTRUATION.

By menorrhagia, or profuse menstruation, is meant an excessive flow of blood at the menstrual periods. When a flow of blood occurs during the interval between the periods, the condition is called metrorrhagia. The treatment of these conditions are the same, therefore a separate notice of them is not given.

These conditions may be caused by debility of the general system, relaxation, or enlargement of the womb, general plethora, polypi, fibrous tumors, retained products of conception, etc., etc.

TREATMENT: Require the patient to remain quiet in bed and if the bowels are constipated regulate them with the Fl. Ext. of Cascara Sagrada.

With a view of checking the flow of blood the following should be given:

Spirits of Cinnamon,.....1½ ounces,

Fl. Ext. of Ergot, sufficient to make, 4 ounces.

Mix and give from ½ to 1 teaspoonful, in a sup of water every two or three hours until the hemorrhage is checked or until the remedy has been given a thorough trial.

Where the hemorrhage is the result of tumors or the retained products of conception these will have to be removed before a cure can be effected.

Where the patient is debilitated the following tonic should be given:

Fl. Ext. of Nux Vomica,.....3 drachms,
Fl. Ext. of Hydrastis,.....1 ounce,
Fl. Ext. of Gentian,.....3 ounces,
Fowler's Solution of Arsenic,.....1½ drachms,
Aromatic Elixir, sufficient to make, 6 ounces.

Mix and give a teaspoonful before each regular meal.

Should these means fail to effect a cure consult a competent physician.

THE MENOPAUSE.

“CHANGE OF LIFE.”

The cessation of menstruation or “change of life” usually occurs after the menstrual function has been performed about thirty years, or about the forty-fifth year of life. In some it occurs earlier and in others later than just stated. It is always looked upon by females with some degree of anxiety.

SYMPTOMS: In healthy females the cessation of menstruation is not generally attended by any impairment of the general health, the discharge either assuming a pale color and diminishing gradually, or terminating in a profuse discharge, the function, afterwards, being suspended for the remainder of life. Not infrequently, in these cases, the breasts and abdomen enlarge and sometimes the female imagines that she is pregnant.

In delicate females, and those who have suffered from previous diseases of menstruation, it is not uncommon to meet with excessive menorrhagia, or profuse uterine hemorrhage, jeopardizing the patient's life. The symptoms in these cases, vary considerably, however, there is

usually more or less pelvic irritation, with a bearing-down sensation; a frequent desire to urinate; heat and tenderness of the vagina, and itching of the vulva.

Various diseases, such as vertigo, hysteria, colic, hemorrhoids, ulcers of the legs, dyspepsia, apoplexy, cancer of the womb, etc., etc., are liable to be developed at this period.

TREATMENT: Avoid exposure to cold and damp; keep the skin clean; adopt a light, nutritious diet, and if the bowels are constipated, regulate them with the Fl. Ext. of Cascara Sagrada.

If the patient is pale and anæmic give the following:

Fl. Ext. of Nux Vomica,3 drachms,
Fl. Ext. of Hydrastis Can.,.....1 ounce,
Fl. Ext. of Gentian,.....3 ounces,
Fowler's Solution of Arsenic....1½ drachms,
Aromatic Elixir, sufficient to make,.6 ounces.

Mix and give a teaspoonful before each regular meal.

Should a profuse hemorrhage occur from the womb, require the patient to assume the recumbent position and remain perfectly quiet; lower the head and shoulders; apply cloths wrung out of cold water to the vulva and lower part of the bowels; and administer from ½ to 1 teaspoonful of the Fl. Ext. of Ergot, every half-hour or hour as the urgency of the case demands. Should these means fail to control the hemorrhage, call a competent physician, who may use a tampon. Where complications arise they should be treated as original affections.

CHLOROSIS.

GREEN SICKNESS.

Chlorosis, or green sickness, is a pronounced anæmia occurring in young girls about the age of puberty. It is a disease in which there is a deficiency of red-blood corpuscles usually associated with the non-appearance or suppression of the menses. Its causes are not understood.

SYMPTOMS: Its principal symptoms are a peculiar, waxy, yellowish, or greenish pallor of the face; pale tongue; almost colorless lips; and in some cases, œdema, or puffiness of the feet and ankles or the face; and a dark circle may appear around each eye. The patient is weak and nervous; there is palpitation of the heart; and the temperature of the body is slightly below normal. Digestion is impaired, and a morbid appetite is sometimes present, as for slate-pencils, chalk, dirt, etc.

TREATMENT: This should be commenced by the administration of the following tonic:

Fl. Ext. of Nux Vomica,.....3 drachms,

Fl. Ext. of Hydrastis Can.,.....1 ounce,

Fl. Ext. of Gentian,.....3 ounces,

Fowler's Solution of Arsenic, ...1½ drachms,

Aromatic Elixir, sufficient to make, 6 ounces.

Mix and give a teaspoonful before each regular meal. Iron is strongly indicated in these cases, but the writer has never had much benefit follow its administration, however, should the reader wish to give it, the Dialyzed Iron, in 20-drop doses four times a day, is the best form of it.

If there is œdema or puffiness of any part of the body 3 or 4 drops of the Fl. Ext. of *Apocynum Canabinum* should be given four times a day.

If the bowels are constipated regulate them with the Fl. Ext. of *Cascara Sagrada*.

The patient's diet should be of the most nutritious character, and moderate exercise should be taken each day in the open air.

LEUCORRHŒA.

“WHITES.”

By leucorrhœa, or “whites” is meant a whitish or yellowish discharge from the vagina or womb, resulting from irritation or inflammation of the lining membrane of the vagina or womb.

The principal causes of leucorrhœa are excessive coition, frequent abortions, or child-bearing, masturbation, mechanical injuries and exposure to cold and damp.

SYMPTOMS: These, in addition to the discharge, are pain and a sense of heaviness in the loins, abdomen and thighs; disorders of digestion; impairment of the general health; and, in some cases, more or less œdema, or swelling of the feet and ankles. When the disease is allowed to continue any considerable time, ulcers are apt to appear on, or about the mouth of the womb, causing the discharge to be tinged or streaked with blood. The discharge is sometimes so acrid that it excoriates the parts over which it flows. Hysteria is often an attendant of leucorrhœa.

TREATMENT: The patient usually needs a tonic, and we know of nothing better than the following:

Fl. Ext. of Cimicifuga,..... $1\frac{1}{2}$ ounces,
 Fl. Ext. of Nux Vomica,.....3 drachms,
 Fl. Ext. of Hydrastis Can.,.....1 ounce,
 Aromatic Elixir, sufficient to make,. 6 ounces.

Mix and give a teaspoonful before each regular meal. If the feet and ankles are swollen, 3 or 4 drops of the Fl. Ext. of Apocynum Cannabinum should also be given four times a day. If the bowels are constipated, they must be regulated with Cascara Sagrada.

The use of the following must not be neglected in these cases:

Bichloride of Mercury,.....15 grains,
 Citric Acid,.....15 grains,
 Water,.....1 quart.

Mix and use as an injection each night after injecting a half-gallon of water as hot as can be borne, or:

Sulphate of Zinc,.....4 drachms,
 Water,.....1 quart.

Mix and use as the preceding.

If the mouth of the womb is ulcerated, the ulcers should be painted with Tr. of Iodine two or three times a week. To accomplish this it will be necessary to use a speculum.

Where the womb is enlarged, not only in leucorrhœa, but in any other disease, saturate a roll of absorbent cotton, four or five inches long and three-fourths of an inch in diameter, with pure Glycerine, attach a silk cord to its center and pack it well up around the mouth of the

womb, allow it to remain twenty-four hours, when, it should be removed and from a half to a gallon of water, as hot as can be borne, used as an injection. These applications should be used two or three times a week until the enlargement is reduced.

VAGINITIS.

INFLAMMATION OF THE VAGINA.

Vaginitis is an inflammation of the mucous membrane lining the canal leading from the vulva to the womb, characterized by more or less fever, pain, heat, and burning of the parts, with a yellowish-colored discharge, which is sometimes so acrid that it excoriates the external parts.

The most common causes of vaginitis are cold, injuries to the vagina, and excessive sexual intercourse.

TREATMENT: Require the patient to assume the recumbent position and remain perfectly quiet; and if she has fever, control it with sedatives administered according to indications. Keep the bowels slightly open with Salts; and during the acute stage of the disease, a quart of warm water, containing 2 or 3 drachms of the Tr. of Opium, should be injected into the vagina every three or four hours. The external application of cloths wrung out of hot water affords some relief, therefore, their use should not be neglected.

As soon as the more acute symptoms have subsided, the mouth of the womb and vaginal walls should be thoroughly cleansed and a tampon of cotton saturated with Carbolyzed Glycerine applied so as to prevent all contact of the opposing walls. This should be renewed each

twenty-four hours. It prevents morbid adhesion of the parts, therefore, its use is important.

PRURITUS VULVÆ.

ITCHING OF THE VULVA.

By pruritus vulvæ, or itching of the vulva, is meant an intolerable itching of the external organs of generation in the female.

The causes of it are very obscure.

TREATMENT: The following is generally efficient in these cases:

Carbolic Acid,.....	20 drops,
Sulphate of Morphine,.....	9 grains,
Borax,.....	6 drachms,
Rose-Water, sufficient to make,....	6 ounces.

Mix and apply to the parts frequently. Keep the bowels slightly open with Salts.

VULVITIS.

INFLAMMATION OF THE VULVA.

This is an inflammation of the external organs of generation in the female; characterized by heat, pain, swelling, and more or less excoriation of the parts, with, in some cases, the formation of an abscess, or small ulcers on the affected parts.

It is usually caused by uncleanness, or an injury, such as a fall or blow.

TREATMENT: Apply cloths wrung out of hot water to the parts, changing them frequently; keep the bowels moderately open with Salts; and if fever is present, control it with sedatives administered according to indi-

cations. Should an abscess form, the pus should be evacuated, by means of an incision, at once.

FLEXION, VERSION, AND PROLAPSUS OF THE WOMB.

When the womb falls forward the neck being bent upon itself, the condition is called Anteflexion; when it falls backward, the neck being bent upon itself, the condition is called Retroflexion. When the womb falls forward without being bent upon itself, the condition is called Anteversion; when it falls backwards against the rectum, without being bent upon itself, the condition is called Retroversion; and when the womb drops down in the vagina, the condition is called Prolapsus, or falling of the womb.

TREATMENT: If the womb is enlarged the Glycerine tampons recommended in leucorrhœa will sometimes effect a cure, however, in these cases it would be advisable to consult a competent physician.

SIGNS OF PREGNANCY.

The principal signs of pregnancy are a cessation of menstruation; morning sickness; a darkening of the circle around the nipples; yellowish or brownish, colored spots on the skin, especially on the face and breasts; more or less incontinence of urine; acidity of the stomach; an excessive secretion of saliva; a tendency to syncope; enlargement of the abdomen; and quickening, or movement of the child, which is the most positive sign. The majority of the foregoing symptoms may be present and

yet the female not be pregnant, or she may be pregnant and have but few of these symptoms.

DISEASES OF PREGNANCY.

The principal diseases of pregnancy are morning sickness, acidity of the stomach or heart-burn, toothache, cedema or puffiness of the feet and ankles, and constipation of the bowels.

MORNING SICKNESS.

This may usually be relieved by requiring the patient to take a light breakfast an hour before arising in the morning. Should this fail, 5 to 10 grains of the Oxalate of Cerium may be given three or four times a day. In some cases it is necessary to terminate the pregnancy in order to prevent the patient's starving. See Irritation of the Stomach.

CONSTIPATION.

See Constipation of the Bowels.

CEDEMA, OR SWELLING OF THE FEET AND ANKLES.

This may usually be checked or relieved with 3 or 4 drops of the Fl. Ext. of *Apocynum Cannabinum* administered four times a day.

TOOTHACHE.

This may usually be overcome with Lime-Water. An ounce of it should be given in sweet milk three or four times a day. See Toothache.

HEART-BURN.

This may usually be relieved with from 5 to 10-grain doses of the Subnitrate of Bismuth, administered occasionally as the urgency of the case demands. Instead

of the Bismuth 20 to 30 grain doses of the Carbonate of Magnesia may be given.

ABORTION.

By abortion is meant the expulsion of the embryo or foetus before the seventh month of pregnancy. When it occurs after this time it is called a miscarriage or premature labor.

The most common causes of abortion and miscarriage are the lifting of heavy weights, worry, excitement, excessive grief, falls, blows, the eruptive fevers and a syphilitic taint of one or both parents.

SYMPTOMS: Intermittent pains in the back, extending into the lower part of the bowels, and more or less hemorrhage from the womb, are about the only symptoms of any importance.

TREATMENT: Require the patient to assume the recumbent position and remain quiet; and administer a $\frac{1}{4}$ of a grain of the Sulphate of Morphine and if the patient is not easy in an hour repeat the dose.

With a view of controlling the hemorrhage cloths wrung out of cold water should be applied to the vulva, changing them frequently. Should these means fail to afford relief call a competent physician at once.

As soon as the pain subsides give a teaspoonful of the Fl. Ext. of Black Haw three times a day before meals.

In addition to the foregoing, if the patient is syphilitic, the following should be given:

Bichloride of Mercury,..... $1\frac{1}{2}$ grains,
Iodide of Potash,.....1 ounce,

Water, sufficient to make,.....6 ounces.

Mix and give a teaspoonful after each regular meal.

LABOR; PARTURITION.

CONFINEMENT OR CHILD-BIRTH.

Labor, parturition, confinement, or child-birth, is the expulsion of the foetus, after-birth, etc., at full term. This occurs at the end of nine calendar months and one week, or about two hundred and eighty days from the last menstruation, and about one hundred and forty days after quickening or the first movements of the child. Labor may occur a few days earlier, or a few days later, than the time just stated. "The process of labor is accomplished by the contractions of the womb, assisted, in the latter stage, by contractions of the muscles of the abdomen. The time occupied in the process, varies considerably; but on an average, it continues from three to six hours; and more children are born between sunset and sunrise than during the day, in the proportion of ten to seven."

"The principal symptoms of approaching labor is a settling down of the womb, which relieves the female very much, causing her to have a lighter feeling, to breathe more freely, to be in better spirits, and to move more actively than for two or three months before. Not infrequently, there will be a constant desire to evacuate the bowels or bladder. A flow of bloody mucus also takes place in most instances, called 'the show;' and flying pains in the back and loins, wakefulness, nervous excitability, etc., are apt to be present. Some-

times, owing to constipation, great weariness, rheumatism, etc., a kind of pain will be felt in the latter weeks of pregnancy, which are termed 'false pains,' and which may be determined from true pains, by observing that the latter commonly begin in the back, and spread around the bowels, in the region of the womb, that they come on regularly, with intervals of freedom from pain, and that they acquire more severity, as well as frequency, with the advance of labor. If during their presence pressure with the hand be made upon the bowels so as to feel the womb, this organ will be felt firm, hard, and contracting, somewhat like a hard tumor, becoming soft as the pain ceases."—King.

Labor is divided into four varieties; natural labor; protracted, tedious, or difficult labor; preternatural labor; and complicated labor.

Labor is said to be natural when the child's head presents so as to be the first part born, and where the process of expulsion does not exceed twenty-four hours, being completed by the unaided efforts of nature, or with the aid commonly bestowed.

By protracted, tedious, or difficult labor, is meant the same as the preceding, with the exception that the process of expulsion exceeds twenty-four hours, and the patient may need some kind of artificial aid before it can be completed, as the use of Ergot, instruments, etc.

Labor is said to be preternatural when any other part of the child presents at the mouth of the womb except the head; where the cord or navel-string falls down so as

to show itself on the outside when the waters break, and where there are two or more children.

When labor is accompanied by convulsions, severe hemorrhage, etc., it is called complicated.

Natural labor is divided into three stages; First, Second and Third.

The first stage continues until the mouth of the womb becomes thoroughly dilated or opened, which may usually be known by the rupturing of the membranes, and the discharge of the waters or amniotic fluid.

The second stage of labor continues from the complete dilatation of the mouth of the womb or discharge of the waters, until the birth of the child is completed.

The third stage of labor continues from the birth of the child until the after-birth is expelled.

During the first stage of labor there are severe, cutting, grinding, or sawing pains in the back, extending to the loins, the front of the abdomen and pubes, and terminating in the groins or upper part of the thighs. They usually occur regularly at intervals of ten to twenty minutes, increasing in frequency and severity as the labor advances, the female being almost entirely free from pain during the intervals. Flashes of heat and cold, with a frequent desire to evacuate the bowels and the bladder are usually present. Towards the latter part of this stage there is usually vomiting; or each pain may be ushered in with slight shivering. If an examination is now made, during the presence of a pain, the "bag of waters" will be found tense and protruding from the mouth of the

womb into the vagina; but as the pain subsides it becomes lax and recedes into the uterine cavity. Finally when the mouth of the womb is completely dilated, the patient has a severe pain and the membranes are ruptured, the waters rushing out with a gush and the first stage of labor is at an end.

After a longer or shorter period of freedom from pain, the second stage of labor is ushered in. The pains continue as in the preceding stage, only they are more regular and of an expulsive or bearing-down character, the female fixing her feet firmly upon some immovable point then fills her chest with air, closes her mouth, grasps at any object within her reach, and forcibly strains or bears down.

Upon making an examination, the child's head will be found in the pelvic cavity, each pain forcing it towards, or upon the perinæum, which finally becomes thin and greatly distended, when during a succession of strong, expelling pains, called double pains, the head is born, while at the same time the female usually utters a sharp, agonizing shriek, which is generally followed by sobbing, and after a short period of repose, the remainder of the child is expelled. As soon as the child's head is born, it frequently commences breathing and crying, or if this does not immediately occur, it will, usually as soon as the mucus is removed from its mouth.

After the delivery of the child, the female enjoys a greater or less period of repose, until the third stage of labor commences, when the pains return, but with less

severity than before, and usually after two or three have been experienced the after-birth is expelled. Sometimes the after-birth is delivered with the same pain that expelled the child, however, in a majority of cases, from a few minutes to a half-hour elapses before this takes place.

MANAGEMENT OF NATURAL LABOR.

The management of labor should not be undertaken, when it can possibly be avoided, by any one, who is incompetent to treat any or all complications that may arise, as the health, and frequently the life of both mother and child is sacrificed by the incompetency of the attendant; and if it were not for the fact that it is sometimes impossible to procure the services of a competent attendant at the proper time, the subject would not have been given a place in this work.

During the first stage of uncomplicated labor the female need not be confined to bed, but the bowels and bladder should be thoroughly evacuated. In some cases, especially when the bowels are constipated, an enema of warm soap-suds should be given every half-hour or so, until the bowels move freely, and if the patient is unable to void her urine, the bladder must be emptied by means of a soft rubber-catheter.

When the pains are regular, and rather frequent, an examination should be made to ascertain the condition of the parts, the progress of the labor, and whether the presentation is normal or otherwise. Before making the examination the hands should be thoroughly washed with warm water and soap, the nails thoroughly cleaned,

after which the hands should be bathed in 1 to 500 Bichloride solution (1 grain to the ounce) and then anointed with Vaseline or Lard. The examination should be made during the presence of a pain, care being used, however, not to rupture the membranes.

If it is a head presentation, the round mass of the cranium is at once felt through the lower part of the uterus, but the presentation cannot be positively determined, as a rule, until the membranes are ruptured, which should occur as soon as complete dilatation of the mouth of the womb is completed. Should nature fail to perform this duty, at the proper time, it may be accomplished by pressing on the membranes, during a pain, when they are rendered tense, with some pointed instrument, such as the end of a hair-pin, which is always at hand; or, what is better, a notch may be made in the finger-nail, and, during the presence of a pain, a sawing motion should be made on the membranes. Previous to rupturing the membranes, the patient's bed should be prepared, and she should be required to maintain the recumbent position, not allowing her to assume the erect posture under any pretense, during the remainder of labor.

As soon as the membranes are ruptured, the second stage of labor is ushered in. The patient should now be required to lie upon the back, with the legs semi-flexed, two attendants being present constantly, one on each side of the bed, to give support to the knees, and hold the hands during each pain. The patient must be instructed

to hold her breath during these expulsive efforts, and to remain as quiet as possible in their absence.

A vaginal examination should be made from time to time, though, not too often, to determine the progress of the labor. The patient's clothing should consist of a light gown, which should be tucked up under the shoulders to prevent its being soiled. This should be attended to before the waters break.

As soon as the head begins to distend the perinæum, the attendant should keep a finger on it so as to support the parts at the proper time, which is, as the head emerge from the vulva. This is accomplished by placing the palm of the hand over the perinæum and making gentle pressure upwards and forwards. The pressure should only be made while a pain is present, however, the parts should be supported at this stage in the absence of a pain. It is also necessary to support the perinæum while the shoulders are being born. As soon as the head is expelled, the attendant should pass a finger around the neck of the child, and if it be embraced by one or more turns of the umbilical cord, it must be liberated by loosening it, and passing it over the head; and a finger should also be passed into the child's mouth, to remove any mucus that may be present.

The first duty of the attendant after the child is born, is to examine the lower part of the mother's abdomen, to ascertain the condition of the womb. If it has contracted, a hard, spherical knot will be felt, and, if it has not con-

tracted, the abdomen should be kneaded until contraction occurs.

The attention should now be turned to the child. If it is breathing properly, the cord should be securely tied with a soft cotton or silk cord, an inch and a half or two inches from the child's body, being careful not to include any portion of a protruding intestine. Another ligature should also be placed around the cord two inches from the first one, towards the placental extremity. The cord may now be severed with a pair of sharp scissors, between the two ligatures, and the child passed to the nurse, who should anoint its entire body with common lard or Vaseline, and then thoroughly wash it with warm water and a good quality of toilet soap.

If the child fails to breathe, when first born, cold water may be sprinkled upon its head and breast. Should this not accomplish the desired result, artificial respiration must be resorted to. This consists of raising the arms above the head and bringing them down by the sides once every four or five seconds, making slight pressure on the breast while the arms are being brought down. Where these means fail to produce respiration, a small hole should be cut in a thick piece of cloth, which should be placed over the baby's mouth. The attendant, holding the baby's nose, should now apply her mouth to that of the baby and inflate its lungs with air, which should be gently pressed out and the lungs inflated again as before. Should this fail to produce respiration, the cord may be tied and severed at once, and the baby's entire body

placed in a warm bath, being careful however, not to allow its mouth and nose to be covered with water.

If after giving the proper attention to the child, the after-birth is not expelled, the abdomen should be kneaded, making gentle pressure downwards upon the womb. Should this fail to effect its expulsion very light traction may be made upon the cord during a contraction of the womb. This is accomplished by wrapping the cord around the fingers of the left-hand and introducing two fingers of the right-hand into the vagina, and holding the cord with the left-hand and making slight traction downward and backward by pressing on the cord with the fingers that are in the vagina. If the after-birth comes away, when it emerges from the vulva, it should be turned over and over several times for the purpose of forming a cord of the remaining shreds. Should the after-birth fail to be expelled, after trying the foregoing means, a competent physician should be called at once.

When the after-birth is expelled the patient's limbs and the lower part of her trunk should be carefully sponged with warm water, and then thoroughly dried by means of a soft cloth, after which, all soiled articles must be removed from the bed; but do not allow the female to assume the erect posture for at least ten days.

The gown should now be drawn down; an accurate fitting binder should be applied around the lower part of the body, to support the relaxed abdomen; and cloths should be loosely placed to the vulva, to receive the discharge and prevent its soiling the patient's garments

and bed-clothes. The new mother should now be properly covered and allowed to rest.

When the child is properly washed, the dressing of the navel must next be attended to. A piece of soft linen, about four inches square, is taken, and a hole is cut in it large enough to admit the passage of the cord. The linen is then smeared with Vaseline or common lard and placed on the abdomen, with the cord passing through the hole. The stump of the cord is then made to point towards the child's left shoulder, and another piece of linen, greased as the first one, is laid over it. A bandage is then firmly applied around the body; but care must be used not to have it too tight. After the child is dressed it should be placed in the bed with its mother and allowed to nurse. This favors contraction of the womb, and is, therefore, beneficial to the mother, besides, the breasts contain a watery secretion that nature designed as the infant's first laxative.

TREATMENT AFTER DELIVERY.

FLOODING: Lower the patient's head and shoulders; knead the abdomen over the region of the womb; and give a teaspoonful of the Fl. Ext. of Ergot every ten, twenty, or thirty minutes, owing to the severity of the hemorrhage. When the hemorrhage occurs before the delivery of the after-birth, in addition to the foregoing treatment, the after-birth must be removed at once.

Admit a free current of fresh air into the patient's room; and if the pulse becomes weak administer stimulants, as Brandy, Whiskey, Aromatic Spirits of Ammonia,

the 1-40 to 1-30 of a grain of the Sulphate of Strychnine, etc. The latter may be used hypodermically.

AFTER-PAINS: These may be relieved with 6 or 8-grain doses of Dover's Powder, or $\frac{1}{4}$ -grain doses of the Sulphate of Morphine, every three or four hours as the urgency of the case demands.

THE BOWELS: At the end of forty-eight hours after confinement, earlier than this if the patient has headache or fever, Salts or Oil should be given to procure an action from the bowels. After this the bowels should act each day.

"MILK-FEVER:" In the course of two or three days females usually have what is commonly called "milk-fever." This, as a rule, either precedes or accompanies the secretion of milk, and only lasts about twenty-four or thirty-six hours. Nothing is necessary in these cases except to control the fever and keep the bowels open with Oil, Salts or Seidlitz Powders.

FISSURED NIPPLES: Many nursing women suffer severely, after each confinement, with sore nipples. This may usually be prevented by washing the nipples four or five times a day with a solution of 20 grains of Tannin to the ounce of water for three or four weeks before the birth of the child.

When the nipples are already fissured, or inflamed, a hot poultice should be applied to them and changed every hour until relief is obtained. The parts should then be washed with a solution of Carbolic Acid containing 5 drops to the ounce of water; and the nipple should

be covered with lint, which must be kept wet with the same solution. If this treatment is followed, the soreness will rapidly disappear and the skin will heal in a few days. As long as the soreness remains, the nipple should be protected, when the child nurses, by a nipple-shield, which may be obtained at any first-class drug store. When once healed, the skin can be hardened, and a recurrence of the trouble prevented, by washing the nipple, each time, just after the child nurses, and then applying the solution of Tannin previously recommended.

CARE OF THE INFANT.

The child should be washed once a day with warm water and a good quality of toilet soap. After washing, those parts, which are liable to friction, as the arm-pits, buttocks, folds of the groins, etc., they should be well dried and then dusted with the following:

Powdered Talcum,.....4 drachms,

Powdered Boracic Acid,.....1 drachm,

Powdered Oxide of Zinc,.....3 drachms.

Mix and use as a dusting powder. This course of cleanliness will usually prevent diseases of the skin.

The dressing of the navel should not be disturbed until the stump of the cord separates from the body, which is usually from the fourth to the sixth day. A little Olive Oil may be applied to the dressing if it appears dry and hard. If the child fails to have an action from the bowels, in the course of ten or twelve hours 15 drops of Oil may be given. If there is scantiness of urine, or if the child fails to pass urine within a reasonable time

after its birth, the urinary organs being perfect, 1 or 2 drops of the Fl. Ext. of Buchu must be given every three or four hours until the desired effects are obtained.

INFLAMMATION OF THE BREASTS: The newly born frequently have an inflammation of the breasts. The following is usually all that is required in these cases:

Tr. of Camphor,.....1 drachm,
Olive Oil,.....3 drachms.

Mix and apply to the inflamed part every three hours. In addition to this, if the inflammation is severe, warm poultices should be used.

FEEDING THE INFANT: The only food that should be given to an infant before it is six months old is the milk of its mother. If, from any cause, it is impossible for the infant to obtain this, the best substitute is the fresh milk of a cow. When it is necessary to raise the child "by hand," or where the mother does not supply the requisite amount of nourishment, the milk, during the first month of the child's life, should be allowed to stand an hour, when, the cream must be removed from its surface, and one part of water added to four parts of the milk, which should have a few grains of Sugar of Milk, or pure white sugar, and a trace of Salt added to it. After warming the milk, thus prepared until its temperature is that of the human body, it may be given to the child.

After the first month it is best to give the milk pure, or at most, with only a part of the cream removed.

MASTITIS.

INFLAMMATION OF THE BREAST.

Inflammation of the breast may occur at any time during lactation, but is more commonly met with soon after confinement. When the inflammation is not controlled during its first stage, it results in an abscess.

It is due to the presence of a microorganism, but the predisposing causes are exposure to cold, bruises, and permitting the breast to become over distended with milk. Young mothers are more subject to it than others.

TREATMENT: Confine the patient to bed and keep the breast empty. This may be accomplished by means of the breast-pump. Give the patient 2 drops of the Fl. Ext. of *Phytolacca Decandra* every three hours; and at the same time use the following:

Tr. of *Veratrum Viride* (Norwood's), 1 ounce,

Fl. Ext. of *Phytolacca Decandra*, 1 ounce,

Glycerine, 1 ounce.

Mix and apply to the breast every two or three hours. Keep the bowels open with Salts and if the patient has fever control it as you would in any other disease.

Should this treatment fail to give relief hot poultices may be applied for the purpose of hastening the formation of pus, which should be promptly emptied, when present, and the cavity cleansed with Peroxide of Hydrogen, and then dressed with Iodoform.

PART X.

MATERIA MEDICA.

Materia Medica is that branch of medical science which treats of the remedies used in medicine.

Medicines are divided into external and internal.

External remedies may either be general, as the hot and the cold bath; or topical, when only applied to a particular part, as blisters, poultices, etc.

Topical remedies have received names, which designate or point out, the particular effect produced, as:

Rubefacients, or agents that cause a redness of the skin, as the various stimulating liniments, mustard-plasters, etc.

Epispastics, or agents that cause blistering.

Discutients, or agents that tend to discuss or drive away swellings or risings.

Refrigerants, or agents that allay heat.

Escharotics, or articles that eat or corrode the tissues to which they are applied.

Internal remedies have also been divided into classes, which have received names denoting the principal effect produced, or the particular organ on which they mostly act, as:

Emetics, or agents that cause vomiting.

Nauseants, or medicines that cause nausea, or a disposition to vomit.

Cathartics, or agents that increase the number of evacuations from the bowels. When their action is mild they are called laxatives; when they cause three or four stools, they are called purgatives; when their action is severe, and accompanied by pain and irritation, they are known as drastic cathartics; when they produce copious watery stools, they are called hydragogue cathartics; and when they augment the flow of bile, they are termed cholagogue cathartics.

Diuretics are medicines that increase the flow of urine.

Emmenagogues are agents supposed to have the power of exciting, or promoting the menses. The greater number of this class are uterine tonics.

Parturients are agents that promote labor, by arousing contractions of the womb.

Abortives are agents that are capable of producing abortion.

Diaphoretics are medicines that produce increased perspiration; agents that cause copious perspiration are termed sudorifics.

Expectorants are agents that facilitate the discharge of mucus and other substances from the air passages.

Sialagogues are agents that increase the flow of saliva, or spittle.

Errhines, or sternutatories, are medicines, which, when snuffed up the nose, cause sneezing and a more or less copious discharge from the nose or nares.

Antacids are agents that counteract or neutralize acidity.

Antalkalines are agents that neutralize alkalinity.

Disinfectants are agents that counteract offensive or unhealthy effluvia.

Antiseptics are agents that resist putrescency, or a tendency to decomposition.

Stimulants are medicines that have the power of exciting the organic action of the different systems of the economy. Some stimulants are diffusible, that is, have a prompt but temporary action; others are more permanent or persistent in their effect.

Anthelmintics, or vermifuges, are agents that remove worms.

Carminatives are agents that allay pain by causing the expulsion of gas from the alimentary canal.

Tonics are agents that gradually give tone and vigor to debilitated organs or to the whole system.

Antiperiodics are medicines that exert an influence antagonistic to that condition of the system which favors the presence of diseases of a periodic character, thereby curing them.

Astringents are agents that cause contraction of the tissues with which they come in contact, thereby lessening or checking their discharges. When they exert their effect upon the external surface of the body they are called Styptics.

Narcotics are agents that depress nervous action by their influence on the brain and spinal cord; they deaden sensibility, lessen the disposition to move, and produce sleep; in large doses they act as sedatives, frequently causing headache, giddiness, double vision, etc.; in small doses they generally act as stimulants.

Anodynes are medicines that allay, or remove pain, by blunting the sensibility of the brain.

Hypnotics are medicines that produce sleep.

Sedatives are medicines that diminish the nervous, muscular and arterial forces; and are used when there is an exalted action of the functions of either or all of these systems.

Antispasmodics are agents that have the power of allaying, or removing, spasms. They vary materially in their mode of action; some agents of this class acting as stimulants, others acting as sedatives or relaxants. Hence spasms due to debility require the former, while those due to mechanical irritation, call for the latter.

Anæsthetics are agents that destroy sensation, as Chloroform and Ether.

Alteratives are medicines that gradually restore health, by acting on the nutritive system, or by changing, or neutralizing, morbid or redundant matters in the circulation, and without any sensible increase of perspiration, or other excretions.

Antaphrodisiacs are agents that lessen or blunt the sexual propensities.

Aphrodisiacs are agents that promote or excite the sexual propensities.

Antipyretics are agents that counteract fever.

WEIGHTS AND MEASURES.

APOTHECARIES' WEIGHT.

Apothecaries' Weight is used by druggists and physicians in weighing medicines for prescriptions. It is as follows:

20 Grains (gr.)	make	1	Scruple, marked, \mathfrak{D} .	
3 Scruples	"	1	Drachm, "	\mathfrak{z} .
8 Drachms	"	1	Ounce, "	\mathfrak{z} .
12 Ounces	"	1	Pound, "	lb.

In writing prescriptions, physicians express the number in Roman characters, using j instead of i final. They also write the symbol first; thus: \mathfrak{Z} v., \mathfrak{Z} vj., \mathfrak{D} ij.

APOTHECARIES' LIQUID MEASURE.

Apothecaries' Liquid measure, is used in compounding and measuring liquid medicines. It is as follows:

60 Drops (gtt.) or minims (m.)	make	1	Drachm, $f\mathfrak{z}$.
8 Drachms (Fluid)	"	1	Ounce, $f\mathfrak{z}$.
16 Ounces (Fluid)	"	1	Pint, O.

THE METRIC SYSTEM.

The following contains all that is necessary to know to enable one to write prescriptions in the Metric System:

.065 Gramm (Gm.)	equals	1	Grain.
1. Gramm	"	"	$15\frac{1}{2}$ Grains.
4. Gramms	"	equal	1 Drachm.
30. Gramms	"	"	1 Ounce.
.065 Cubic Centimeter (C.C.)	equals	1	Gtt. or M.

- | | | | |
|-----|-------------------|--------|----------------|
| 1. | Cubic Centimeter | equals | 15½ Gtt. or M. |
| 4. | Cubic Centimeters | equal | 1 Drachm. |
| 30. | Cubic Centimeters | “ | 1 Ounce. |

In addition to these tables the following will be found useful:

A teaspoonful is equal to 60 drops or 1 drachm.

A tablespoonful is equal to 4 drachms, or ½ ounce.

A large wine-glassful is equal to 2 ounces.

A tea-cupful is equal to 4 ounces.

RELIABLE DRUGS.

In purchasing drugs or having prescriptions filled, see that you get a fresh article, manufactured by a reputable firm, such as Parke, Davis and Company; The Wm. S. Merrell Chemical Company; or other reputable firms. It is dangerous and worse than useless to use inferior drugs. Insist on the best regardless of the price.

VERATRUM VIRIDE.

AMERICAN HELLEBORE.

Veratrum is sedative, antipyretic and antispasmodic. It quiets the nervous system; weakens, or depresses, the heart's action; softens and slows the pulse and reduces fever. It has a tendency, even in small doses, to irritate the stomach, therefore, in all diseases of the stomach and bowels Aconite should be used in its stead. It is one of our most efficient remedies in all fevers where there is a full, strong, quick pulse. It is almost specific in puerperal convulsions. In these cases, it should be given in from 10 to 30-drop doses, preferably hypodermically, every half-hour or hour, as the urgency of the case

demands, until relief is obtained or until the pulse is brought down to fifty per minute. In large doses it frequently acts as an emetic. When combined with equal parts of the Fl. Ext. of *Phytolacca Decandra* and Glycerine, and used locally, every three hours, it is very efficient in the first stages of inflammation of the breasts. Used locally twice a day it usually cures ringworm.

Norwood's Tincture, which is equal in strength to a good Fluid Extract is its most reliable preparation. The dose is from 1 to 3 drops every one or two hours.

ACONITUM NAPELLUS.

ACONITE.

Aconite is sedative, antipyretic, diaphoretic and diuretic. It may be used in all fevers, inflammations or other diseases where the pulse is too quick and too full. It reduces fever, slows and softens the pulse, by depressing the heart's action, and, is quieting to an irritated stomach. In diseases of the stomach and bowels, attended by fever, it should be used instead of *Veratrum*. It is especially THE remedy in fevers or inflammations of children. The Tr. of Aconite Root is the form that should be used.

The dose of the Tr. is from 1 to 5 drops every one or two hours.

GELSEMIUM.

YELLOW JASMINE.

Gelsemium is sedative, antipyretic, antispasmodic, and diaphoretic. It reduces fever, slows and softens the pulse. Combined with *Veratrum* or Aconite it is our very best remedy in active congestion and inflammation

of the brain. It should be given in all fevers and inflammations where there is flushed face with bright eyes and contracted pupils. In from 5 to 10-drop doses combined with from 3 to 5 grains of Acetanilide it is almost specific for headache, especially that of a throbbing character. It is one of our most efficient remedies in convulsions arising from active congestion or inflammation of the brain. In these cases, the first dose should not be less than 10 drops, administered, preferably, hypodermically, after which it may be repeated in smaller doses every hour as the urgency of the case demands. Combined with Veratrum, or alone, it is efficient in puerperal convulsions. It is a very valuable remedy in facial neuralgia. In these cases, it must be given every hour commencing with 5 drops and increasing the dose one drop each hour until it relieves the pain or produces double vision, dizziness, drooping of the upper eyelids or dropping of the under jaw. It is also a valuable remedy in dysmenorrhœa, ovarian neuralgia, orchitis, renal colic, etc. The Fluid Extract is the form that should be used.

The dose of the Fl. Ext. of Gelsemium is from 1 to 10 drops every one or two hours.

POTASSII BROMIDUM.

BROMIDE OF POTASH.

Bromide of Potash is sedative, antispasmodic, and slightly hypnotic. It depresses the heart and has some tendency to reduce fever. It may be used in active congestion or inflammation of the brain and convulsions, where Gelsemium is recommended, however, it

is inferior, in these cases, to this remedy. It is given in large doses, with benefit, in epilepsy. It has a tendency to irritate the stomach; and decreases the sexual propensity.

The dose is 5 to 20 grains every one or two hours. In epilepsy 20 to 60 grains three times a day.

As all the Bromides have practically the same effect we will append a list containing the leading ones of this class, giving their doses:

Bromide of Sodium, dose, 5 to 60 grains.

Bromide of Lithium, dose, 5 to 20 grains.

Bromide of Ammonium, dose, 5 to 20 grains.

Bromide of Calcium, dose, 5 to 60 grains.

Bromide of Zinc, dose, $\frac{1}{2}$ to 2 grains.

ACETANILIDE.

Acetanilide is antipyretic, anodyne, antispasmodic and in large doses sudorific. It is a heart-depressant and may be given with perfect safety and great benefit in all fevers and inflammations where the skin is dry and the pulse too full and too quick. It should not, under any circumstance, be given, where the patient has passive congestion of the brain. Combined with from 5 to 10 drops of the Fl. Ext. of Gelsemium it is almost a specific for headache, especially where the pain is of a throbbing character.

The dose is from 3 to 5 grains every three or four hours.

DIGITALIS.

FOX-GLOVE.

Digitalis is a heart-stimulant and tonic, diaphoretic and diuretic. It reduces fever but strengthens the pulse.

It should be given in all fevers or other conditions where the pulse is weak or irregular. It strengthens the pulse but reduces its frequency, therefore, it is contra-indicated where the pulse is abnormally slow. The combination of Digitalis and Cactus makes one of our most efficient heart-stimulants and tonics.

The dose of the Fl. Ext. of Digitalis is 1 drop every two hours. When used in chronic heart-diseases it may be given in doses of from 1 to 3 drops three or four times a day.

CACTUS GRANDIFLORUS.

NIGHT-BLOOMING CEREUS.

Cactus is a heart- tonic and stimulant, and may be used in all fevers, inflammations, or other diseases where the pulse is weak or irregular. It may be given where the pulse is abnormally slow. Combined with Digitalis it makes one of our most efficient heart-stimulants and tonics. The Fl. Ext. is the form used.

The dose is two drops every two hours. When used for chronic heart-disease the dose may be from 2 to 5 drops three or four times a day.

BELLADONNA.

DEADLY NIGHT-SHADE.

Belladonna is narcotic, antispasmodic and anodyne. In small doses it stimulates the heart and is our very best capillary stimulant. It should be given in all fevers and inflammations where the patient is drowsy, jumping, jerking, or becoming frightened while asleep, the pupils being too large and not contracting upon exposure to a

bright light, indicating passive congestion of the brain. It is efficient in controlling profuse perspiration during or following exhausting diseases. Combined with Ergot and Rhus Aromatica it usually relieves nocturnal incontinence of urine in children.

The Sulphate of Atropine, the active principle of Belladonna, 1-60 of a grain combined with the 1-20 of a grain of the Sulphate of Strychnine and given at one dose, hypodermically, is the very best treatment for the cold stage of congestive intermittents. Atropine is also efficient in night-sweats.

The dose of the Sulphate of Atropine is from 1-100 to 1-60 of a grain.

The dose of the Fl. Ext. of Belladonna is from 1-3 to 3 drops every one or two hours.

STRYCHNIA.

Strychnine is a heart stimulant and nerve-tonic. It is made from Nux Vomica but is far inferior to this article as a general and stomachic tonic. When Strychnine is used in the form of the Sulphate or Nitrate it is one of our most powerful heart-stimulants and tonics. It may be given in all diseases where the pulse is weak, especially where the patient is prostrated. In large doses it is our most efficient remedy in the stage of collapse in cholera, cholera morbus or other exhausting diseases.

It is a valuable remedy in paralysis. Theoretically, the Elixir of Phosphate of Iron, Quinine and Strychnine is a very valuable tonic, but practically it is almost worth-

less. Its dose is from 1 to 2 drachms three times a day. Strychnine may be used hypodermically.

The dose of the Sulphate or the Nitrate of Strychnine is from 1-64 to 1-12 of a grain every four hours. Of course, the latter dose should only be given in extreme cases. The average dose is about 1-40 of a grain every three or four hours.

NITROGLYCERINE.

GLONIN.

Nitroglycerine in doses of from 1-150 to 1-100 of a grain is a heart-stimulant and may be given in angina pectoris and when the heart's action is extremely weak, in pneumonia. It may be given hypodermically. Tablets containing the required dose may be obtained at any first-class drug store. The dose, as previously stated, is from 1-150 to 1-100 of a grain, however, the large dose should not be used except in extreme cases.

NITRITE OF AMYL.

The Amyl Nitrite, is a heart-stimulant and anti-spasmodic. It is useful in counteracting the effects of Chloroform, and in angina pectoris and epilepsy. Perles containing the proper dose may be obtained. It is usually used by inhalation, in epilepsy, when the attack is felt coming on. The dose is from 3 to 5 drops.

SULPHATE OF SPARTEINE.

The Sulphate of Sparteine is a heart-stimulant and may be used in all conditions where the pulse is weak or irregular, especially in chronic diseases of the heart.

The dose is $\frac{1}{4}$ of a grain, however, this may be cautiously increased to 1 grain. It may be given every four hours. Tablets containing the required amount may be obtained at any first-class drug store.

CITRATE OF CAFFEINE.

Caffeine is a heart-stimulant and is made from coffee, and is identical with Thein, which is obtained from tea. It may be used in all conditions where *Digitalis* is recommended, but is far inferior to this drug.

The dose is from 2 to 5 grains every three or four hours.

AROMATIC SPIRITS OF AMMONIA.

The Aromatic Spirits of Ammonia is a heart-stimulant and also a diffusible stimulant. It may be used in all conditions where a stimulant is indicated, such as syncope, collapse, or other forms of sudden heart-failure. It is an efficient antacid in heart-burn dependent upon acidity of the contents of the stomach.

The dose is from 20 to 60 drops, largely diluted with water, every half-hour, hour, two or three hours as the urgency of the case demands.

CAMPHOR.

Camphor is a heart-stimulant, antispasmodic, carminative and rubefacient. As a stimulant it may be used in the cold stage of intermittents and in low forms of fevers. As an antispasmodic it may be used in hysteria, hiccough, dysmenorrhœa, whooping-cough, chordee, etc. As a carminative it may be used in colic and irritable diarrhœas. As a rubefacient, it is much used in the form of a liniment,

in sprains, bruises, rheumatism, etc. It lessens the sexual propensities. Poisonous doses produce headache, vertigo, ringing in the ears, a rapid feeble pulse, convulsions and collapse.

The dose of the Gum is from 1 to 5 grains; the Spirits, from 10 to 30 drops every four hours.

CAPSICUM.

CAYENNE PEPPER.

Capsicum is a stimulant and stomachic tonic; and, when applied externally, is a rubefacient. Large doses produce severe irritation of the stomach and bowels and also of the kidneys. In the form of a liniment it is sometimes efficient in wryneck, rheumatism, sprains, etc. Following an alcoholic debauch, and in the dyspepsia of the aged it is a valuable stomachic. It may be employed to promote the absorption of Quinine. Applied externally in the form of a plaster it is an efficient counter-irritant.

Dose of the powder 1 to 3 grains; of the Fl. Ext. 1 to 3 drops, and of the Tr. 8 to 15 drops, three or more times a day.

WHISKEY.

Whiskey, in small doses, is a stimulant, and in large doses is a narcotic. It is a valuable remedy in the latter stages of pneumonia and in all low forms of fever. When combined with fresh, sweet milk, or, in the form of egg-nog, it is also a valuable food. It may be used in all conditions demanding a stimulant. It is a valuable remedy in the treatment of poisonous bites and stings, however, it should not be given in sufficient amounts to produce

drunkenness. Owing to the depressing effect of the virus it requires more of it to produce intoxication than under ordinary circumstances. The intoxicating properties in Whiskey, Wine, Brandy, Beer, etc., is Alcohol, therefore, when Whiskey cannot be obtained Alcohol may be diluted and used in its stead.

The proper amount of Whiskey to be used during twenty-four hours is from 4 to 10 ounces.

QUININIA.

QUININE.

Quinine is our very best antiperiodic. It is also a valuable tonic. If rightly used, even chronic malaria could almost invariably be cured by it alone. It is THE remedy for any ache, pain or fever, that comes on at a certain time each day. The proper way to use it, is to commence six and one-half hours before the expected appearance of the ache, pain, chill, or fever and give 5 grains of the Sulphate of Quinine every two hours until four doses are taken. When taken in this manner the last dose is taken half an hour before the expected paroxysm. In congestive chills the dose should be 10 grains; and the patient must be kept under the influence of the drug until all danger of another paroxysm is passed. In remittent fever give it during the remission.

Combined with Dover's Powder it is efficient in colds.

QUINIDINA (ALKALOID).

QUINIDINE.

Quinidine is the alkaloid of Peruvian Bark and may be used in all cases where the Sulphate of Quinine is used and in the same size dose.

Potter claims that it is more efficient as an antiperiodic than the Sulphate of Quinine. When combined with Simple Syrup, as follows, it makes the "Tasteless Syrup of Quinine:"

Quinidine (alkaloid),.....80 grains,
Simple Syrup, sufficient to make,....2 ounces.

Mix. Each teaspoonful contains 5 grains of the Quinidine, the proper dose for an adult.

ARSENICUM.

ARSENIC.

Arsenic, in small doses, is an efficient general and stomachic tonic and is one of our most efficient remedies in the treatment of chronic malaria. It may be given in any condition where patients need building up. It has given good results, in doses of 2 or 3 drops, of Fowler's Solution, every five hours, in ulcer of the stomach. It is usually efficient in the treatment of chorea, however, in these cases, large doses are required. The following is said to be efficient in removing cancers and cancerous growths:

Arsenious Acid,.....2 drachms,
Powdered Gum Arabic,.....1 drachm,
Hydrochlorate of Cocaine,.....18 grains.

Mix and add a sufficient amount of water to form a paste of the consistency of thick cream. This should be spread on rubber-plaster and applied to the sore or tumor and allowed to remain from eighteen to thirty-six hours, when, if required, a fresh application may be made. These plasters cause the tumor or growth to turn black,

their edges being surrounded by an inflamed border. After removing the plaster a flax-seed-meal poultice should be applied and continued until the slough separates, when, the sore may be treated as an ordinary ulcer.

Fowler's Solution of Arsenic (Liquor Potassii Arsenitis) is the form of it usually used internally.

The dose is from 1 to 10 drops three times a day. The dose of Arsenious Acid is from 1-40 to 1-10 of a grain.

NUX VOMICA.

Nux Vomica is a general tonic and may be used in all conditions, in the absence of fever, where patients are weak or debilitated from any cause. It increases the appetite, improves digestion, stimulates the heart, and is our very best nerve-tonic. When combined with Quinine, Hydrastis and Arsenic it makes the best treatment known for chronic malaria. It is efficient in dyspepsia; and combined with other remedies makes our most efficient "female tonic."

The dose of the Fl. Ext. of Nux Vomica is from 3 to 5 drops before each regular meal.

HYDRASTIS CANADENSIS.

GOLDEN SEAL.

Hydrastis is tonic, antiperiodic and antiseptic. It stimulates the liver and the secretions of the stomach and bowels. In the treatment of malaria it stands next to Quinine. As a stomachic tonic it has no superior and when combined with other remedies, as Nux Vomica and Gentian, it is almost specific in atonic dyspepsia.

It makes an excellent mouth-wash, eye-water, and wash in gonorrhœa, leucorrhœa and old sores.

The dose of the Fl. Ext. of Hydrastis is from 10 to 30 drops three times a day before meals.

GENTIANA LUTEA.

GENTIAN.

Gentian is one of our most reliable stomachic tonics. It is a very valuable remedy in chronic indigestion, in the dyspepsia of consumption and in the early stages of cancer of the stomach. It may be given, advantageously, in all conditions where patients are debilitated.

The dose of the Fl. Ext. of Gentian is from 30 to 60 drops three times a day before meals.

OLEUM MORRHUÆ.

COD-LIVER OIL.

Cod-Liver Oil is a food rather than a medicine, and, as such, it is undoubtedly inferior to good fresh cream, butter or other palatable and nutritious articles; but should the reader be determined to use it, the dose is from 1 to 4 drachms floated on the surface of Whiskey or in capsules two or three hours after meals. It is usually given in pulmonary tuberculosis and other conditions where there is persistent loss of flesh.

PHOSPHORUS.

Phosphorus is a nerve-tonic, and in small doses stimulates the growth of bones. It may be used in chronic nervous exhaustion, neuralgia, anæmia, wakefulness of the aged, locomotor ataxia, threatened softening of the brain; and is a valuable remedy in impotence, especially

that of a functional character. It may be used in the form of the Phosphide of Zinc, in doses of 1-30 to 1-10 of a grain, or Phosphorus, in pill-form in doses of 1-100 to 1-50 of a grain three times a day after meals.

TR. FERRI CHLORIDI.

TR. MURIATE OF IRON.

Theoretically Iron is a very valuable tonic in all anæmic conditions, but practically it is not, probably, so good. It may be used in all conditions where the lips and tongue show a want of color, such as is seen in chlorosis, however, in these cases, the Dialyzed Iron should be given in doses of from 10 to 30 drops. The Tr. of Muriate of Iron is a valuable remedy in erysipelas. In these cases, it may be given in from 10 to 30-drop doses, largely diluted with water, every three or four hours. Combined with Chlorate of Potash, Water, and Glycerine it makes a valuable gargle in throat troubles, especially, tonsillitis.

Monsel's Solution (Liquor Ferri Subsulphatis) is our most efficient styptic and may be used locally, undiluted in all hemorrhages; and in hemorrhage from the stomach it may be given in doses of 5 drops well diluted. The Hydrated Oxide of Iron is the antidote to poisoning by Arsenic. The dose, in these cases, is a tablespoonful or more every few minutes.

The dose of the Tr. of the Chloride of Iron is from 5 to 30 drops, well diluted; in acute diseases, every three or four hours; in chronic diseases three times a day.

DAMIANA.

Damiana is tonic and in large doses a laxative. It is a useful remedy in impotence, increasing the sexual desire and the power of the reproductive organs. It is also efficient in renal and cystic catarrh and in irritation of the urinary passages. It is also valuable in respiratory disorders, especially those accompanied by profuse secretion.

The dose of the Fl. Ext. of Damiana is from 30 to 60 drops three or four times a day.

COLINSONIA CANADENSIS.

STONE-ROOT.

Colinsonia is a stomachic tonic, also a heart-tonic. It is a useful remedy in chronic laryngitis; and, combined with Hydrastis it is a very efficient remedy in chronic gastric catarrh. It is also an efficient remedy in hemorrhoids, especially where there is a relaxed condition of the lower bowel, with a sense of fullness, or of a foreign body in the rectum. Where the heart's action is feeble, combined with Cactus, it produces good results.

The dose of the Fl. Ext. of Colinsonia Canadensis is from 5 to 15 drops three or four times a day.

CRATÆGUS OXYCANTHA.

HAWTHORNE.

Cratægus Oxycantha is an efficient remedy in angina pectoris, hypertrophy of the heart, valvular insufficiency and præcordial oppression. In cardiac dropsy its action is very beneficial, and, in other forms of dropsy it is said to produce good results. It is said to cure diseases of the heart where all other remedies have failed.

The dose of the Fl. Ext. of *Cratægus Oxycantha* is from 10 to 15 drops three or four times a day.

HUMULUS LUPULUS.

HOPS.

Humulus Lupulus is a tonic and hypnotic. It aids digestion and adds force and volume to the heart; and, when this organ is irregular from indigestion, by stimulating the stomach, it often relieves. It is quieting to the nervous system and is useful in insomnia, facial neuralgia, delirium tremens and is an efficient remedy in priapism and chordee. It is an aphrodisiac.

The dose of Lupulin, which is made from Hops and has the same effects, is from 5 to 15 grains.

The Fl. Ext. of *Humulus Lupulus* is from 10 to 30 drops, repeated as is required.

CHIONANTHUS VIRGINICA.

FRINGE TREE.

Chionanthus is tonic, and a very efficient cholagogue. It should be given in all diseases where there is yellowness of the eyes or skin indicating biliousness. When combined with the Fl. Ext. of *Nux Vomica*, it is the most efficient remedy, in jaundice, known to this writer.

The dose of the Fl. Ext. of *Chionanthus Virginica* is from 10 to 30 drops, three or four times a day.

HYDRARGYRUM.

MERCURY; QUICKSILVER.

We shall confine our remarks to the four most important forms of Mercury; Calomel, Bichloride, Biniodide, and Turpeth Mineral.

HYDRARGYRI CHLORIDUM MITE.

CALOMEL.

Calomel is sialagogue, cathartic, diuretic and probably a stimulant to the lymphatic system. It is now very generally admitted to be a sedative to the liver instead of a stimulant. It has been more used and abused than any other remedy in the whole *Materia Medica*, however, when properly used it is perfectly harmless and a very valuable remedy. It should be given in all fevers and inflammations where there is a yellowish coating on the tongue, especially if this organ is rather dry. It should always be combined with Ipecac and Soda, when given, thus:

Calomel,.....1 grain,
Powd. Ipecac,.....1 grain,
Bicarbonate of Soda,.....10 grains.

Mix and divide into five powders and give one every hour. These usually act very nicely on the bowels, but should they fail, Oil, Salts or a Seidlitz Powder must be given.

Never, under any circumstances, should more than one grain of Calomel be introduced into the system at one time, however, this amount may be given and repeated from day to day as is indicated throughout the attack of sickness. When used in small doses we obtain all of its beneficial effects and none of its injurious effects.

The writer is thoroughly convinced that many cases of intractable diarrhœa, hemorrhage, and even perforation of the intestines, in typhoid fever, occur as a result of large doses of Calomel, or other cathartics, administered

at the beginning of the attack. Where the excessive use of cathartic medicines does not produce these results, there is no doubt whatever, in the writer's mind, but what they so weaken patients with typhoid fever, pneumonia, and other exhausting diseases, that many of them finally die of weakness, when, had it not been for the excessive use of cathartics they may have recovered. Remember that cathartics cure no known disease. All up-to-date physicians have long since abandoned the use of harsh cathartics in the treatment of fevers and inflammations.

Calomel in 1-5-grain doses every hour until five are taken is efficient in quieting an irritable stomach, especially when the bowels are constipated.

The dose of Calomel is 1-10 to 1-5 of a grain every half-hour or hour until one grain is taken. Tablets of it the required size may be obtained at any first-class drug store.

HYDRARGYRI CHLORIDUM CORROSIVUM.

CORROSIVE SUBLIMATE; BICHLORIDE OF MERCURY.

Corrosive Sublimate is alterative, antiseptic and parasiticide. As an alterative it is one of our most efficient remedies, especially, when combined with Iodide of Potash as in the following:

Corrosive Sublimate,.....2 grains,

Iodide of Potash,.....1 ounce,

Water, sufficient to make,.....6 ounces.

Mix; the dose is a teaspoonful after each regular meal. It is especially efficient in constitutional syphilis, usually

being all that is required in these cases. It may also be used in all diseases where an alterative is indicated. Its use as an internal antiseptic is of doubtful utility.

As an antiseptic or germicide, when used externally, it is one of our most efficient agents. It unites with albuminous matter forming an inert compound, therefore, to prevent this, a small amount of Citric Acid should be added to it, thus:

Corrosive Sublimate,.....	7½ grains,
Citric Acid,.....	4 grains,
Water,.....	1 pint.

Mix; this makes a 1 to 1000 solution, and if half the amount of water is used the strength, of course, would be 1 to 500; and if one quart of water is used the strength of the solution would be 1 to 2,000. Using these statements, by a simple calculation, the reader may make a solution of any strength desired. If the water with which the solution is made contains lime a small amount of common salt should be added to it; this prevents the formation of a precipitate.

For rendering the skin and hands aseptic after washing thoroughly with warm water and soap, a solution of from 1 to 500 or 1 to 1,000 should be used. On small wounds a solution of from 1 to 2,000 to 1 to 1,000 may be used, but on large wounds or in large cavities a solution of 1 to 10,000 or 1 to 5,000 should be used. Corrosive Sublimate is very poisonous, therefore, when it is used on a large wound or in a large cavity the solution should not be strong. It should not be used in the peritoneal cavity.

It makes an efficient wash in cystitis, leucorrhœa and gonorrhœa. In these cases, the strength of the solution may be from 1 to 10,000 to 1 to 5,000.

It is an efficient parasiticide in pediculosis pubis and ringworm. In these cases, the solution should be rather strong and applied every two or three days until a cure is effected.

Bichloride is capable of destroying most bacteria even in solutions of 1 to 20,000 and their spores, in solutions of 1 to 10,000. Some microorganisms, as the bacillus of anthrax, are much less susceptible to its influence than other forms.

The dose of Corrosive Sublimate is from 1-64 to 1-10 of a grain, three times a day after meals. We do not recommend the dose as large as 1-10 of a grain, neither do we recommend its use internally as an antiseptic believing that we possess more efficient internal antiseptics.

HYDRARGYRI IODIDUM RUBRUM.

BINIODIDE OF MERCURY.

Biniodide of Mercury is similar in its effects to the Bichloride but we only wish to use it as an alterative, and especially in constitutional syphilis. It may be prepared for use as follows:

Biniodide of Mercury,.....	3 grains,
Alcohol,.....	1 ounce.

Mix and give ten drops three times a day after meals, or:

Biniodide of Mercury,.....3 grains,
 Iodide of Potash,.....1 ounce,
 Water, sufficient to make,.....6 ounces.

Mix and give a teaspoonful after each regular meal, or:

Biniodide of Mercury,.....3 grains,
 Iodide of Potash,.....1 ounce,
 Compound Syr. of Stillingia, sufficient to make, 6 ounces.

Mix and give a teaspoonful after each regular meal.

Either of these prescriptions is very efficient in secondary or tertiary syphilis.

The dose of Biniodide of Mercury is from 1-50 to 1-12 of a grain three times a day after meals.

HYDRARGYRI SUBSULPHAS FLAVUS.

TURPETH MINERAL.

This preparation of mercury is an emetic and was formerly much used in croup but it has been replaced to a great extent, by less poisonous and less irritating drugs.

The dose is from 2 to 3 grains repeated only once.

COMPOUND SYRUP OF STILLINGIA.

The Compound Syrup of Stillingia is an alterative and may be used in all conditions where such agents are indicated but its principal use is as a menstruum for more potent remedies.

The dose is from 1 to 2 drachms three times a day.

POTASSII IODIDUM.

IODIDE OF POTASH.

The Iodide of Potash is one of our most efficient alteratives and is a valuable remedy in a variety of morbid

conditions. It is efficient in constitutional syphilis; lessens the pain of aneurism; and is believed by many physicians, to be curative in these cases. It is efficient in pleurisy after the stage of effusion; chronic rheumatism; boils; asthma; and lead-poisoning.

Large doses of the drug cause burning in the stomach, nausea, vomiting and diarrhoea. The continuous use of it frequently causes headache; lachrymation; running from the nose; sneezing; soreness of the throat; an increased flow of saliva; and an eruption on the skin. When these symptoms occur the dose should be decreased or the drug discontinued for a few days. Some patients do not bear it well, especially those suffering with chronic Bright's disease. As much as 300 grains, or more, of the drug have been given daily, but there does not seem to be any good reason or common sense in giving such enormous amounts.

The dose of Iodide of Potash is from 5 to 20 grains three times a day after meals.

CALX SULPHURATA.

SULPHIDE OF CALCIUM.

Sulphide of Calcium is an alterative and is efficient in arresting suppuration. It has been found especially useful in pustular acne, boils and carbuncles. It is an efficient remedy in follicular tonsillitis and good results have followed its use in diphtheria.

The dose of the Sulphide of Calcium is from $\frac{1}{8}$ to 2 grains every one, two, or three hours.

IODUM.

IODINE.

Iodine is an alterative disinfectant and deodorant, and when applied to the skin is irritant. It was formerly much used as a local application in erysipelas but is now replaced by more efficient and less disagreeable remedies. It is efficient when used in the form of the Tincture in the treatment of ringworm.

Combined with Carbolic Acid, as in the following formula, it is very efficient in the treatment of typhoid fever, especially when the tongue is red and dry.

Tr. of Iodine,.....1 drachm,
 Carbolic Acid,..... $\frac{1}{2}$ drachm,
 Powd. Gum Arabic,.....1 drachm,
 Water, sufficient to make,.....4 ounces.

Mix and give a teaspoonful every four or six hours. In preparing the above prescription first dissolve the Gum Arabic in water, then, add the other articles.

The dose of the Tr. of Iodine is from 1 to 5 drops three or more times a day.

PHYTOLACCA DECANDRA.

POKE-ROOT.

Poke-root is an alterative, in large or poisonous doses, it is emetic, cathartic, and narcotic.

It is a very efficient remedy in the treatment of inflammation of the glandular structures, especially of the lymphatic glands. Administered internally, and at the same time applied externally by means of absorbent cotton saturated with the Fluid Extract it is efficient in

aborting buboes and inflammation of other glands, as the sublingual, submaxillary, etc. It is also very efficient in inflammation of the breasts of nursing women. It is also one of our most useful remedies in the treatment of orchitis, ovaritis, prostatitis, laryngitis, pharyngitis, tonsillitis and even diphtheria. Combined with Salicylate of Soda, made from Wintergreen, and Cimicifuga it is the very best treatment for rheumatism.

The dose of the Fl. Ext. of *Phytolacca Decandra* is from 1 to 10 drops every two or three hours to three or four times a day.

AURI ET SODII CHLORIDUM.

CHLORIDE OF GOLD AND SODA.

The Chloride of Gold and Soda, is alterative and tonic and often remarkably retards the progress of locomotor ataxia. It is also a useful remedy in syphilis, amenorrhœa, and functional impotence, etc.

The dose is from 1-30 to 1-16 of a grain, in pills, three times a day.

CIMICIFUGA RACEMOSA.

BLACK COHOSH.

Cimicifuga is anti-spasmodic, aphrodisiac, diaphoretic, diuretic, and expectorant. It is a useful remedy in wryneck, muscular soreness and rheumatism. It is one of our best remedies in chorea. In these cases it should be used in large doses. It stimulates the sexual organs and is a very efficient female-tonic.

The dose of the Fl. Ext. of *Cimicifuga* is from 5 to 30 drops every two hours to three or four times a day.

CAULOPHYLLUM THALICTROIDES.

BLUE COHOSH.

Blue Cohosh is emmenagogue, anti-spasmodic and slightly diuretic. It is an efficient remedy in dysmenorrhœa and pain in the region of the uterus.

The dose of the Fl. Ext. of Caulophyllum is from 10 to 30 drops three times a day.

THUJA OCCIDENTALIS.

ARBOR VITÆ.

Thuja is emmenagogue, and is said to be efficient.

The dose of the Oil of Thuja is from 1 to 5 drops three times a day. The Tr. of it may be applied to warts two or three times a day.

VIBURNUM PRUNIFOLIUM.

BLACK HAW.

Black Haw is a sedative and tonic to the uterine and ovarian nerve-centers. It is a very efficient anti-abortive and is also useful in uterine congestion, ovarian irritation, irregular menstruation, dysmenorrhœa, and menorrhagia.

The dose of the Fl. Ext. of Viburnum is from 20 to 60 drops, three or four times a day.

PULSATILLA.

PASQUE-FLOWER.

Pulsatilla is a stimulant to that portion of the sympathetic nervous system influencing the reproductive organs. It is especially useful in uterine disorders and diseases of the sexual organs in both males and females, attended by fear of impending danger.

The dose of the Fl. Ext. is from 3 to 5 drops three or four times a day.

HEDEOMA PULEGIOIDES.

PENNYROYAL.

Pennyroyal is an emmenagogue especially in suppression of the menses brought on by exposure. It should be given during the time the menstrual flow should occur and the patient should take a hot sitz-bath each night.

The dose of the Infusion of Pennyroyal is from 1 to 2 ounces.

The dose of the Oil of Pennyroyal is from 3 to 10 drops three times a day.

GOSSYPHII RADICIS.

COTTON-ROOT BARK.

Gossypium is an emmenagogue and is sometimes an efficient remedy in amenorrhœa.

The dose of the Fl. Ext. of Gossypium is from 30 to 45 drops three times a day.

CINNAMOMUM.

CINNAMON.

Cinnamon is efficient in checking menorrhagia and may be combined with Ergot in these cases.

The dose of the Oil of Cinnamon is from 1 to 5 drops.

The dose of the Spirits of Cinnamon is from 10 to 30 drops every one or two hours.

ERGOTA.

ERGOT.

Ergot is a hemostatic and parturient. In large doses it acts as a gastro-intestinal irritant, causing nausea,

vomiting, purging, colic, difficult micturition, and thirst. The continued use of it either produces convulsions or gangrene.

It is our most efficient remedy in controlling internal hemorrhages. In hemorrhage from the lungs, stomach, and kidneys, it should be given combined with *Rhus Aromatica*, thus:

Fl. Ext. of Ergot,.....1 ounce,

Fl. Ext. of *Rhus Aromatica*,.....1 ounce.

Mix and give from a half to a teaspoonful every hour or so until relieved. In uterine hemorrhage it may be given in teaspoonful doses every half-hour or hour as the urgency of the case demands. In menorrhagia it may be combined with cinnamon, as follows:

Spirits of Cinnamon,.....1½ ounces,

Fl. Ext. of Ergot,.....2½ ounces.

Mix and give a teaspoonful every one, two, or three hours as the urgency of the case demands.

It is also efficient in enuresis and nocturnal incontinence of urine, especially when combined with the following:

Fl. Ext. of *Belladonna*,.....1 drachm,

Fl. Ext. of *Rhus Aromatica*,.....2 ounces,

Fl. Ext. of Ergot, sufficient to make, . . .4 ounces.

Mix and give from a half to a teaspoonful four times a day.

In teaspoonful doses it increases labor pains, but should not be given in these cases unless the mouth of the womb is dilated and the presentation normal.

RHUS AROMATICA.

FRAGRANT SUMACH.

Rhus Aromatica is hemostatic, astringent, and tonic. It is very efficient in hemorrhage from the lungs, stomach, and kidneys, however, it is rarely given alone but usually in combination with Ergot. It is one of our most efficient remedies in the treatment of nocturnal incontinence of urine in children; and in the incontinence of urine in the aged. It is useful in diabetes mellitus and also in diabetes insipidus. See Ergot.

The dose of the Fl. Ext. of Rhus Aromatica is from 10 drops to a drachm.

BAROSMA BETULINA.

BUCHU.

Buchu is a stimulating diuretic, and renders the urine more or less antiseptic. It is useful in subacute inflammation and irritability of the bladder and may be given in all diseases where there is scantiness of urine. The dose of the Fl. Ext. of Buchu is from $\frac{1}{2}$ to 1 drachm.

POLYTRICHUM.

HAIR-CAP MOSS.

Polytrichum is an unirritating hydragogue diuretic and may be used in acute nephritis after the more acute symptoms have subsided. It is an efficient remedy in dropsical conditions arising from diseases of the liver or kidneys. Its use has been known to remove as much as forty pounds of urine from a dropsical patient in twenty-four hours. It is said to be useful in gonorrhœa and irritation of the bladder.

The dose of the Fl. Ext. of Polytrichum is from 1 to 2 drachms every four hours or three or four times a day.

APOCYNUM CANNABINUM.

CANADIAN HEMP.

Apocynum is a heart-stimulant and tonic and also a valuable stimulating diuretic. In large doses it acts as a hydragogue cathartic and an emetic. In dropsical conditions with puffiness of the face, feet, ankles, or hands, followed by general dropsy, and in œdema of the feet and ankles during pregnancy, it is one of the most efficient remedies known to this writer. It is almost specific in coughs attended by the expectoration of a watery material and swelling, or puffiness of the face, feet or hands.

The dose of the Fl. Ext. of Apocynum Cannabinum is 3 or 4 drops three or four times a day.

HYDRANGEA.

Hydrangea is a diuretic and is thought to possess the power of checking the formation of renal or cystic calculi. It is useful in irritation of the kidneys, bladder and urethra; and in cases of gravel it exerts a soothing and alterative effect on the entire urinary tract.

The dose of the Fl. Ext. of Hydrangea is from $\frac{1}{2}$ to 2 drachms every four hours or three or four times a day.

CHIMAPHILA.

PIPSISSEWA.

Chimaphila, is a diuretic and is useful in pyelitis and inflammation of the bladder after the more active symptoms have subsided. It is a useful remedy in dropsy and enlargement of the lymphatic glands.

The dose of the Fl. Ext. of *Chimaphila* is from $\frac{1}{2}$ to 2 drachms every four hours or three or four times a day.

COPAIBA.

BALSAM OF COPAIBA.

Copaiba is a stimulating diuretic and is useful in pyelitis, cystitis and gonorrhœa, however, it should not be used until the more acute symptoms have subsided to some extent. It is also useful in subacute and chronic bronchitis with profuse purulent expectoration. It is also a useful remedy as a stimulant application, in indolent ulcers.

The dose of the Balsam of Copaiba is from 10 grains to a drachm, in capsules three or four times a day.

ASCLEPIAS SYRIACA.

SILKWEED.

Asclepias Syriaca is a stimulant diuretic and may be used in inflammation of the kidneys, bladder and urethra, after the more acute symptoms have subsided.

The dose of the Fl. Ext. of *Asclepias Syriaca* is from 10 to 30 drops four or five times a day or oftener.

STIGMATA MAYDIS.

CORN-SILK.

Corn-Silk is diuretic, demulcent, and antiseptic, and is one of our most efficient remedies in inflammation of the bladder.

The dose of the Fl. Ext. of *Stigmata Maydis* is from $\frac{1}{2}$ to 2 drachms four or five times a day.

LITHII CITRAS.

CITRATE OF LITHIUM.

Citrate of Lithium is said to be efficient in preventing the formation of calculi in the kidneys and bladder.

The dose is from 5 to 20 grains three or four times a day.

POTASSII ACETAS.

ACETATE OF POTASH.

Acetate of Potash is an alkaline diuretic and may be used in all fevers and inflammations, except when the urine is already alkaline, where there is scantiness of urine.

The dose is from 15 to 60 grains largely diluted with water, every four hours.

PILOCARPUS.

JABORANDI.

Jaborandi is sudorific, sialagogue, and diuretic. It depresses the heart and lowers the temperature. It is a valuable remedy in œdema of the glottis and in uræmia. In these cases on account of the unreliability of its Fluid Extract one of its alkaloids, the Hydrochlorate of Pilocarpine, is usually given. It produces profuse perspiration and a free flow of saliva. The remedy is a very active one, therefore, care must be exercised in its use.

The dose of the Fl. Ext. of Jaborandi is from 20 to 60 drops; and the dose of the Hydrochlorate of Pilocarpine is from 1-12 to 1-2 of a grain, hypodermically, 1-6 of a grain.

ECHINACEA ANGUSTIFOLIA.

CONE FLOWER.

Echinacea is alterative and antiseptic and probably a stimulant to the entire glandular system. In typhoid fever, septic and pyæmic conditions it is one of our most efficient remedies. It has been used with success in syphilis; and is an efficient local application in chancre, chancroid, anthrax, erysipelas, etc. Given internally and applied freely to the wound it is practically a specific in poisonous bites and stings. Beneficial results are claimed for it in tetanus, hydrophobia, diphtheria, and cerebro-spinal meningitis. That it has the power, when its administration is commenced early, of aborting typhoid fever is claimed by many reputable physicians. It may be used externally in from 25 to 50 per cent solutions or full strength. It appears to be non-poisonous.

The dose of the Fl. Ext. of Echinacea is from 10 to 30 drops every hour or two to three or four times a day.

BAPTISIA TINCTORIA.

WILD INDIGO.

Baptisia is an antiseptic and may be used in typhoid or other fevers where the tongue and mucous membranes are dry and of a dark-red or purplish color. Locally it may be used as a gargle in sore throat and as a douche in nasal catarrh. In these cases a 25 to 50 per cent solution of the Fluid Extract of it is the proper strength to be used.

The dose of the Fl. Ext. of Baptisia is from 1 to 5 drops every one or two hours.

NAPHTHALIN.

Naphthalin is an antiseptic and is an excellent remedy in typhoid fever and diarrhœa. It is also efficient in preventing fermentation of the contents of the stomach.

The following is also efficient in scabies and ringworm:

Naphthalin, 1 drachm,

Vaseline, 1 ounce.

Mix and apply two or three times a day.

The dose of Naphthalin is from 2 to 10 grains every four or six hours. It is best given in capsules combined with an equal amount of Sugar of Milk.

SALOL.

Salol is antiseptic, antipyretic and germicide. It depresses the heart's action, lowers temperature, and produces profuse sweating. It is an efficient antiseptic in typhoid fever where there is a high fever with a full, strong pulse. It is said to be efficient in duodenal catarrh; jaundice caused from an inflammation of the bile ducts; the bilious form of sick-headache; and in some forms of neuralgia. It is said to be efficient in rheumatism and a disinfectant in catarrh of the bladder. We do not think very much of it as a remedy.

The dose of Salol is from 5 to 60 grains, in capsules, every four or six hours. We do not recommend the large doses.

SODII SULPHIS.

SULPHITE OF SODA.

Sulphite of Soda is an antiseptic and antacid. It is one of our most efficient remedies in all fevers,

or other diseases, where there is a broad pallid tongue uniformly coated with a dirty, whitish, pasty fur, however, its administration should be discontinued as soon as the fur is removed from the tongue or the color of the tongue is changed. It makes an efficient wash in aphthous sore mouth; and also in foul-smelling ulcers.

The dose of Sulphite of Soda is from 10 to 20 grains every three or four hours.

ACIDUM CARBOLICUM.—95 per cent.

CARBOLIC ACID.

Carbolic Acid is antiseptic and germicide. A solution of 1 to 1,000 prevents the development of most bacteria. It is an efficient remedy in irritation of the stomach; and combined with Iodine makes a very efficient antiseptic in typhoid fever, thus:

Carbolic Acid,.....	$\frac{1}{2}$ drachm,
Tr. of Iodine,.....	1 drachm,
Powd. Gum Arabic,.....	1 drachm,
Water, sufficient to make,.....	4 ounces.

Mix and give a teaspoonful every four or six hours. A 5 per cent. solution of Carbolic Acid is efficient for disinfecting soiled clothing and the various discharges. The following is an efficient antiseptic application for burns, sores, wounds or erysipelas:

Carbolic Acid,.....	1 ounce,
Gum Camphor,.....	1 ounce,
Alcohol,.....	$\frac{1}{2}$ ounce,
Glycerine,.....	$\frac{1}{2}$ ounce,
Olive Oil,.....	3 ounces.

Mix and apply as often as is necessary. If it appears to be too strong add more Olive Oil. The following makes an efficient salve:

Carbolic Acid,.....5 drops,
Vaseline,.....1 ounce.

Mix thoroughly and apply three or four times a day. A solution of Carbolic Acid is efficient in relieving itching of the various parts of the body.

The dose is from $\frac{1}{2}$ to 2 drops of a 95 per cent solution, which is always meant when the remedy is referred to in this work.

TEREBINTHINA.

SPIRITS OF TURPENTINE.

Turpentine is antiseptic, diuretic, anthelmintic and rubefacient. In typhoid or other low forms of fever, it is one of our most efficient antiseptics. Where the tongue is red and dry or brown and appears as if it had been glazed and especially if the abdomen is tympanitic, Turpentine should be given. The dose should be small, not more than 2 or 3 drops every three or four hours. It is best given in starch-water.

It is an efficient counter-irritant; and for this purpose, it may be used by means of flannel cloths saturated with it. In peritonitis, dysentery, etc., a tablespoonful of it may be added to a quart of hot water and cloths wrung out of this applied to the bowels. These applications may also be used in typhoid fever when the bowels are swollen. In combination with other articles it makes a valuable liniment.

The dose of Spirits of Turpentine is given in standard medical works from 5 to 15 drops; and as an anthelmintic $\frac{1}{2}$ ounce, but the dose we would recommend is from 1 to 5 drops every four hours. We believe that large doses of it are injurious.

ACIDUM HYDROCHLORICUM.

HYDROCHLORIC OR MURIATIC ACID.

Hydrochloric Acid is an antiseptic and overcomes excessive alkalinity of the system. It is an efficient remedy in typhoid or other low forms of fever where the tongue and mucous membranes are redder than natural or red and dry.

It may also be used in doses of 3 or 4 drops, largely diluted with water, half an hour before each regular meal to overcome acidity of the stomach; or if there is a deficiency of acid in the stomach it may be given after meals.

The dose is from 2 to 5 drops well diluted every three or four hours.

IODOFORM.

Iodoform is alterative and antiseptic. Its antiseptic properties are limited, however, it is a valuable dressing for infected wounds, chancroid, ulcers, etc. In the form of Iodoform Gauze it makes an excellent packing for deep wounds, sinuses, fistulæ, and the vaginal, rectal and nasal cavities. It is our very best dressing for recent wounds of almost every description. The only objection to it is its offensive odor.

It is an efficient remedy in dysentery with ulceration of the bowels which may be known by the appearance of pus in the discharges from the bowels. In these cases it may be given, combined with Bismuth, in doses of one or two grains every three or four hours.

The dose of Iodoform is from 1 to 3 grains every three or four hours.

ACIDUM BORICUM.

BORACIC ACID.

Boracic Acid is an antiseptic; and in solution of 10 or 15 grains to the ounce of sterilized water it has a wide range of usefulness in inflammatory diseases of the eyes, nose, throat and bladder. Insufflations of Powd. Boracic Acid are very valuable in otorrhœa, however, care should be used in these cases, to prevent clogging of the outflow of pus, etc. It is also valuable in superficial burns.

In pruritus, or itching, the following usually affords prompt relief:

Boracic Acid,	.....40 grains,
Carbolic Acid,	.....20 drops,
Glycerine,	.....$\frac{1}{2}$ ounce,
Water, sufficient to make,	.....4 ounces.

Mix and apply to the part frequently.

The following makes a valuable dusting powder:

Boracic Acid,	.....2 drachms,
Salicylic Acid,	.....24 grains,
Powd. Starch,	.....4 drachms.

Mix and use as required.

BISMUTHI SUBNITRAS.

SUBNITRATE OF BISMUTH.

Subnitrate of Bismuth is astringent and antiseptic; and when taken into the stomach acts on this organ as a sedative and antacid. It is one of our very best remedies in irritable conditions or inflammation of the stomach and bowels. In gastric ulcer and diarrhœa it is one of our most efficient remedies. Even cancer of the stomach may be temporarily relieved by it. It is practically non-poisonous.

The dose is from 5 to 60 grains every one, two or three hours.

ZINCI SULPHOCARBOLAS.

SULPHOCARBOLATE OF ZINC.

Sulphocarbolate of Zinc is astringent and antiseptic. It is an efficient remedy in diarrhœa and dysentery and may be combined with Bismuth. A solution of it, 5 grains to the ounce, makes an efficient throat or mouth-wash; and $2\frac{1}{2}$ or 3 grains to the ounce of water makes an efficient injection in gonorrhœa.

The dose is 2 to 3 grains every three or four hours.

PLUMBI ACETAS.

SUGAR OF LEAD.

Sugar of Lead is an astringent and as such it is useful in hemorrhage from the stomach, diarrhœa, conjunctivitis, gonorrhœa, etc. In diarrhœa it is usually combined with Opium. As an eye-water, or a wash in gonorrhœa, the solution is made of from 1 to 5 grains of it to the ounce of water.

The following is useful in bruises, sprains, superficial inflammations and erysipelas:

Sugar of Lead,.....1 drachm,
Laudanum,.....1 ounce,
Water, sufficient to make,.....8 ounces.

Mix and apply frequently.

The dose of Sugar of Lead is from $\frac{1}{4}$ to 5 grains every three or four hours.

ACIDUM TANNICUM.

TANNIC ACID; TANNIN.

Tannin is astringent and styptic. It is efficient in checking hemorrhage from external surfaces. In these cases it should be applied in the form of a saturated solution. Injected into the nose it is also efficient in controlling hemorrhage from this source. It is efficient in controlling hemorrhage from the stomach. In these cases it should be given in the form of a powder, in full doses.

Either alone or combined with Bismuth it is efficient in checking diarrhoea.

The dose of Tannin is from 1 to 10 grains every one, two, or three hours.

ARGENTUM.

SILVER.

Nitrate of Silver, or "Caustic," when applied to the skin, pure, it acts as a superficial escharotic producing a slough, which, on exposure to light turns black. When administered internally it is an astringent and germicide. The prolonged use of Silver, internally, produces a dark

discoloration of the skin, which is permanent. It is an efficient remedy in ulcer of the stomach and chronic diarrhœa.

In solution of 10 to 40 grains to the ounce it is a very useful application in inflammation or ulceration of the mouth; or instead of the solution the solid stick may be employed. In purulent conjunctivitis a solution containing from 3 to 5 grains to the ounce is the very best treatment. It should be applied with a camel's hair pencil. Copious irrigations of the urethra with a warm solution, 1 to 10,000 of the Nitrate of Silver is very beneficial in gonorrhœa. In chronic diarrhœa and dysentery copious injections into the bowel of a solution containing 10 to 30 grains to the pint is often very beneficial.

The Nitrate and also the Oxide of Silver have been used with good results in locomotor ataxia, epilepsy, and chorea, but their use in these diseases is now condemned, however, should other treatment fail they may be used.

The dose of the Nitrate of Silver is from $\frac{1}{6}$ to $\frac{1}{2}$ grain three or four times a day.

The dose of the Oxide of Silver is from $\frac{1}{2}$ to 2 grains, three or four times a day.

CUPRI SULPHAS.

BLUE VITRIOL; BLUE STONE.

Blue Stone, in small doses, is an astringent; in large doses, an emetic. Combined with Opium it is sometimes very efficient in obstinate chronic diarrhœa. It is an efficient antidote in Phosphorus poisoning, forming an insoluble coat over the phosphorus.

In indolent ulcers, ulcerative inflammations of the mouth and chronic granular conjunctivitis (trachoma) the lids should be penciled with the solid crystals of Blue Stone. As an injection in gonorrhœa, after the more acute symptoms have subsided, 2 grains to the ounce of water is efficient.

The dose, as an astringent, is from $\frac{1}{6}$ to 1 grain three or four times a day. As an emetic the dose is from 6 to 12 grains, but it is too irritating to be used for this purpose.

MYRICA CERIFERA.

BAYBERRY-BARK.

Myrica Cerifera is an unirritating, stimulating mucous astringent, and in diarrhœa and dysentery is one of our very best remedies. It is rarely ever given alone but in combination with other remedies, as follows:

Fl. Ext. of Bayberry,..... $\frac{1}{2}$ ounce,
 Subnitrate of Bismuth,..... $1\frac{1}{2}$ drachms,
 Paregoric, sufficient to make,.....2 ounces.

Mix, put it in a large-mouth vial, and give a teaspoonful every one, two, or three hours as is required, or:

Powd. Bayberry,.....4 drachms,
 Sulphocarbolate of Zinc,.....48 grains,
 Subnitrate of Bismuth,..... $1\frac{1}{2}$ drachms,
 Naphthaline,.....16 grains.

Mix thoroughly and divide into sixteen powders and give one every three or four hours as is needed.

An infusion or a strong solution of Bayberry makes an efficient gargle or mouth-wash.

The dose of Powd. Bayberry is from 10 to 30 grains; and the dose of the Fl. Ext. is from 10 to 30 drops every one, to four hours.

ZINCI OXIDUM.

OXIDE OF ZINC.

The Oxide of Zinc is an astringent and is very useful in checking night-sweats. The Oxide of Zinc Ointment is useful in acute skin affections, and, when the following is added to it, it makes a valuable local application for fever-blisters (herpes), burns, eczema, erysipelas, etc.:

Carbolic Acid,..... $\frac{1}{2}$ drachm,

Oil of Cade (Younkin's),.....1 drachm,

Oxide of Zinc Ointment,.....1 ounce.

Mix and apply three or four times a day.

The dose of the Oxide of Zinc is from 1 to 5 grains three or four times a day.

ZINCI SULPHAS.

SULPHATE OF ZINC.

Sulphate of Zinc is an astringent and in large doses an emetic. In solution of from 1 to 2 grains to the ounce it makes an efficient eye-water. In solution of $\frac{1}{2}$ grain to the ounce, gradually increased to 5 or 6 grains, it is efficient in gonorrhœa and leucorrhœa.

Its internal use is not recommended in this work.

CADMII SULPHAS.

SULPHATE OF CADMIUM.

Sulphate of Cadmium is an astringent. It makes an excellent eye-water in solution of 2 grains to the ounce.

It is efficient in removing opacity of the cornea. It is not used internally.

PINUS CANADENSIS.

HEMLOCK SPRUCE.

Pinus Canadensis is an astringent and may be used where the effects of Tannin is desired. It makes an efficient throat-wash either diluted or the Fl. Ext. in full strength. A solution of it may be used in leucorrhœa, gonorrhœa, and gleet. In these cases, it may be used in the strength of 1 ounce to 6 or 8 of water.

The dose of the Fl. Ext. of *Pinus Canadensis* is from 10 to 30 drops every three or four hours.

HAMAMELIS.

WITCH-HAZEL.

Hamamelis is an astringent, and is recommended in varicose veins and hemorrhoids. In the latter, it is used as a wash and in the former it is taken internally. It has a popular reputation as a topical remedy in sprains, bruises and small wounds.

The dose of the Fl. Ext. of *Hamamelis* is from 10 to 60 drops three or four times a day.

OPIUM.

Opium is analgesic, hypnotic, diaphoretic, narcotic, and antispasmodic. It is used to relieve pain; check cough; produce sleep; to check excessive discharges from the bowels; and to control the peristaltic action of the intestines in dysentery or other diseases. It is our most efficient remedy in colic, whether it is hepatic, stomachic, intestinal or renal; and it relieves convulsions after all

other remedies have failed. It is also our very best remedy with which to quiet an irritable stomach; but in these cases, it should be given in the form of the Sulphate of Morphine.

All forms of Opium are badly borne by young children, and, if given to them at all, it should be in doses far less than the proportionate dose of other drugs for their respective ages.

The dose of the Gum or Powd. Opium is from $\frac{1}{2}$ to 2 grains not oftener than every four or six hours.

MORPHINÆ SULPHAS.

SULPHATE OF MORPHINE.

Morphine has a similar effect to that of Opium. It is our most efficient remedy in the treatment of the various forms of colic. It usually relieves the paroxysms of asthma promptly; and is the very best treatment for cholera and cholera morbus. It is usually efficient in irritable conditions of the stomach; and relieves convulsions when all other remedies have failed. Loomis says that it is the best treatment in uræmic poisoning. The addition, to each dose, of 1-100 of a grain of the Sulphate of Atropine makes it more efficient in relieving pain and lessens the danger of poisoning. It is far more prompt and efficient in its action when given hypodermically. In using it hypodermically give from the $\frac{1}{6}$ to the $\frac{1}{4}$ of a grain and if the patient is not relieved in twenty or thirty minutes repeat the dose, then do not give another dose of it under three or four hours.

The dose of the Sulphate of Morphine is from $\frac{1}{8}$ to $\frac{1}{4}$ of a grain not oftener, after the second dose, which may

be given in thirty or forty minutes, than every three or four hours.

TR. OF OPIUM.

LAUDANUM.

Laudanum is the Tr. of Opium and has the same effects as the Gum or Powd. Opium.

One drop of Laudanum has produced death in a child one day old.

The dose of Laudanum is from 10 to 20 drops not oftener than from four to six hours.

TR. OPII CAMPHORATA.

PAREGORIC.

Paregoric contains Camphor, Benzoic Acid, Oil of Anise and about 2 grains of Powd. Opium per ounce. It is an efficient remedy.

The dose of Paregoric is from $\frac{1}{2}$ to 4 drachms every three or four hours.

PULVIS IPECACUANHÆ ET OPII.

DOVER'S POWDER.

Dover's Powder contains 10 per cent of Powd. Opium; 10 per cent of Powd. Ipecac; and 80 per cent of Sugar of Milk. On account of the Ipecac it is more diaphoretic than the other forms of Opium. Combined with Quinine, a 10 grain dose of each, and a hot foot-bath before retiring at night is efficient in breaking a cold. Dover's Powder is also efficient in controlling after-pains.

The dose is 10 grains or less, every three or four hours.

CODEINA.

CODEINE.

Codeine has effects similar to the other forms of Opium, however, it is less constipating. It, as well as other forms of the drug, has been given with good results in diabetes mellitus. Codeine is sometimes added to cough syrups with advantage.

The dose of Codeine is from 1-5 to 1 grain every three or four hours; or in diabetes mellitus, 2 grains three times a day.

CHLORAL.

HYDRATE OF CHLORAL.

Chloral is hypnotic, producing quiet, natural sleep. Large doses depress the heart. It is efficient in controlling uræmic and puerperal convulsions; and, combined with Bromide of Potash, is probably our best antispasmodic in the treatment of tetanus and Strychnine-poisoning.

Chloral is almost a specific in nettle rash; and combined with Quinine it prevents this drug from producing a rash on the skin in persons possessing this idiosyncrasy.

The dose of Chloral is from 10 to 20 grains, in Mint-Water, every hour until the desired results are obtained or until two or three doses are given.

LOBELIA INFLATA.

LOBELIA.

Lobelia is expectorant, antispasmodic, and in large doses emetic. It is our very best expectorant. Where the cough is loose and the expectoration profuse, small

doses of it should be given, but where the cough is harsh and the expectoration scant, larger doses of it should be given. It is almost a specific for croup. In these cases, from 10 to 20 drops of the Tr. should be given every five or ten minutes until relief is obtained or vomiting produced. In a great majority of cases of croup, an attack may be prevented by giving a full dose of the drug as soon as symptoms of the disease are discovered. Frequently children after being placed in bed at night, cough so incessantly that they cannot sleep nor allow any one else to do so. In these cases, a full dose of the Tr. of Lobelia quiets the little fellow's cough for the night.

The following is one of our most useful cough syrups:

Tr. of Lobelia,.....1 drachm,

Fl. Ext. of Ipecac,.....16 drops,

Syrup of Wild Cherry, sufficient to make,.2 ounces.

Mix and give a teaspoonful every three or four hours.

This prescription is especially useful in whooping-cough.

In difficult labor from a rigidity of the mouth of the womb, Lobelia is an efficient remedy. In these cases it may be given in frequently repeated doses until nausea is produced. It is also an efficient remedy in hysterical convulsions, also in Rhus Toxicodendron poisoning. The dose of the Tr., in coughs, is from 2 to 6 drops every three or four hours; in croup and rigid os, it is from 10 to 30 drops every few minutes until relief is obtained or vomiting produced.

IPECACUANHA.

IPECAC.

Ipecac is expectorant, emetic and in small doses anti-emetic. In the form of the Syrup or the Fl. Ext. it is a very efficient expectorant and relieves croup promptly. In these cases, it may be given in from 5 to 10-drop doses every few minutes until relief is obtained or vomiting produced, and from 1 to 4 drachms of the Syrup may be used in the same manner.

The Fl. Ext. in doses of $\frac{1}{2}$ drop every hour is efficient in quieting an irritable stomach. It is an efficient remedy in dysentery. In these cases, it should be given in an amount just short of producing nausea.

The dose of the Fl. Ext., is from 1 to 5 drops, as an expectorant; as an emetic, 20 drops; the Syrup, from 2 to 4 drachms; and of Powd. Ipecac, as an expectorant, from 1 to 5 grains, as an emetic 20 grains.

SYRUPUS PRUNI VIRGINIANÆ.

SYRUP OF WILD CHERRY.

Wild Cherry is tonic and a feeble nerve-sedative. Its greatest use is as a vehicle for unpalatable drugs.

The dose is from $\frac{1}{2}$ to 1 drachm as often as is required.

AMMONII CHLORIDUM.

CHLORIDE OF AMMONIA.

Chloride of Ammonia is a stimulant expectorant and may be used in chronic bronchitis, or other diseases where the matter expectorated is profuse.

The following is excellent in these cases:

Chloride of Ammonia,.....4 drachms,
 Fl. Ext. of Squill,.....2 drachms,
 Tr. of Tolu,.....1 ounce,
 Syrup of Wild Cherry, sufficient to make,...4 ounces.

Mix and give a teaspoonful every three or four hours.

GRINDELIA ROBUSTA.

Grindelia Robusta is efficient in the treatment of asthma and other coughs of an explosive character. It is said to be an antidote to Rhus poisoning. In these cases, an ounce of the Fl. Ext. may be added to a pint of water and the parts kept wet with it by means of cloths.

The dose of the Fl. Ext. of Grindelia Robusta is from 15 to 60 drops every three or four hours, to three times a day.

SPIRITS OF CHLOROFORM.

Chloroform is an anesthetic, sedative, carminative, and anthelmintic. When administered for the purpose of producing anæsthesia it is administered by inhalation. Chloroform is useful in colic, whether hepatic, gastric, intestinal or renal. In hepatic and renal colic it may be necessary to give it by inhalation. It is an efficient remedy in the colic of young children.

The dose is from 20 to 60 drops, well diluted, every half-hour or so. Judgement must be exercised in its use, especially by inhalation.

COCAINÆ HYDROCHLORAS.

HYDROCHLORATE OF COCAINE.

Cocaine in solution of from 4 to 6 per cent is a very efficient local anæsthetic, especially to mucous membranes.

It is a very efficient remedy in quieting an irritable stomach.

The dose is from $\frac{1}{4}$ to 2 grains every one, two or three hours, however, small doses should be given in irritation of the stomach.

POLYMNIA UVEDALIA.

BEARSFOOT.

Polymnia Uvedalia is one of our very best remedies in enlargement of the spleen of malarial origin. It is also efficient in enlargement of the liver and inflammation and enlargement of the lymphatic glands. The Fl. Ext. of it is used internally, and an ointment of it is used externally, especially in enlargement of the lymphatic glands.

The dose of the Fl. Ext. of Polymnia Uvedalia is 15 drops three times a day after meals.

GRINDELIA SQUARROSA.

Grindelia Squarrosa and Grindelia Robusta belong to the same natural order, compositæ, but this by no means proves that their effects are the same. The Jamestown weed, tobacco, belladonna, tomatoes and potatoes belong to the same natural order, solanacea, but their effects are entirely different and it is just so with Grindelia Squarrosa and Grindelia Robusta.

Grindelia Squarrosa is one of our most efficient remedies in enlargement of the spleen, especially where it is of malarial origin. It is usually combined with Polymnia Uvedalia.

The dose of the Fl. Ext. is 30 drops three times a day after meals.

OLEUM RICINI.

CASTOR OIL.

Wherever the word Oil, without a qualifying word, is used in this book Castor Oil is meant.

MAGNESIA SULPHAS.

EPSOM SALTS; SALTS.

Wherever the word Salts occurs in this book, without a qualifying word, Epsom Salts is meant.

POISONS AND ANTIDOTES.

ACIDS.

Hydrochloric.	Alkalies, Bicarbonate of Soda,
Nitric.	Chalk; induce vomiting, then,
Sulphuric.	give raw eggs, fixed oils, milk, or other bland liquids.
	Chalk in suspension. Induce
Oxalic.	vomiting, then, give bland liquids.
	Dilute Aqua Ammonia, Iron,
Prussic.	Chloride or Citrate in solution. Induce vomiting, then, give stimulants.
	Alcohol, the best, Sodium,
Carbolic,	or Salts, mucilage. Induce vomiting, then, give stimulants.

ALKALIES.

Ammonia.	Vinegar, lemon-juice, or other
Caustic Soda.	dilute acids, fixed oils. Induce
Caustic Potash.	vomiting, then, give bland
Lye.	liquids.

ARSENIC.

Induce vomiting, or use the stomach tube, then, give the Hydrated Oxide of Iron, Dialyzed Iron, Salt, Castor Oil or Ammonia.

SUGAR OF LEAD.

Salts or Sulphate of Soda, Dilute Sulphuric Acid. Induce vomiting, then, give Oil and bland liquids.

Corrosive Sublimate. Induce vomiting, then, give Tartar Emetic. raw eggs, Oil, Tannin.

Blue Vitriol.

Induce vomiting, then, give

Verdigris.

raw eggs, milk and other bland liquids.

Phosphorus.

Induce vomiting, then, give Salts, Sulphate of Copper, old Oil of Turpentine.

Silver Nitrate.

Large quantities of salt-water, bland liquids.

Iodine.

Induce vomiting, then, give starch and water repeatedly.

Opium.

Morphine.

Induce repeated vomiting or use the stomach tube. Give Atropine and Permanganate of Potash hypodermically. Strong coffee by mouth and also by rectal injection. Keep the patient awake and if necessary employ artificial respiration.

Chloral.	Induce vomiting, give Aromatic Spirits of Ammonia, Strychnine, Nitroglycerine.
Strychnine.	Induce vomiting, then, give Bromide of Potash and Chloral and keep the patient quiet.
Aconite.	Emetics, Oil, Salts, Strychnine, Nitroglycerine, Whiskey,
Belladonna.	Aromatic Spirits of Ammonia
Tobacco.	and other stimulants.
Stramonium.	
Ptomaines.	

THE DOSE OF MEDICINE.

In prescribing for children under twelve years of age the following rule of Dr. Young is sufficiently accurate: Add 12 to the number representing the age of the child, in years, and divide the latter number by the result. Thus, a child two years old requires $(2 \text{ (age)} + 12 = 14. \quad 2 \div 14 = \frac{2}{14} \text{ or } \frac{1}{7})$, one-seventh of an adult dose; a child of three years, one-fifth, thus: $3 + 12 = 15. \quad 3 \div 15 = \frac{1}{5}$, or one-fifth of the adult dose.

TABLE OF DOSES.

NAMES OF MEDICINES.	MONTHS.			YEARS.					THE AM'T
	Under 3	4 to 7	8 to 12	1 to 3	4 to 7	8 to 12	12 to 16	16 to 20	
Acid, Aromatic Sulphuric.	$\frac{2}{3}$	1	$1\frac{1}{3}$	2	4	6	10	16	drops.
Acid, Carbolic.	$\frac{1}{32}$	$\frac{1}{30}$	$\frac{1}{12}$	$\frac{1}{8}$	$\frac{1}{5}$	$\frac{1}{3}$	$\frac{2}{3}$	1	"
Acid, Hydrochloric.	$\frac{3}{16}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{5}$	1	2	3	"
Acid, Dilute Nitric.	$\frac{1}{2}$	$\frac{2}{3}$	1	2	3	4	7	10	"
Acid, Sulphurous.	$1\frac{1}{3}$	2	$2\frac{1}{3}$	4	12	15	18	30	"
Aconite Root, Tr. of.	$\frac{1}{18}$	$\frac{1}{15}$	$\frac{1}{6}$	$\frac{1}{4}$	$\frac{2}{5}$	$\frac{2}{3}$	$1\frac{1}{3}$	2	"
Acetanilide.	$\frac{1}{36}$	$\frac{1}{30}$	$\frac{1}{12}$	1	$1\frac{1}{2}$	2	$3\frac{1}{2}$	5	grs.
Ammonia, Aromatic Spirits.	$1\frac{1}{3}$	2	$2\frac{2}{3}$	4	12	16	18	30	drops.
Ammonia, Carbonate of.	$\frac{3}{16}$	$\frac{2}{3}$	1	2	3	4	7	10	grs.
Ammonia, Chloride of.	$\frac{3}{16}$	$\frac{2}{3}$	1	2	3	4	7	10	"
Amygdalus Per., Fl. Ext. of.	$\frac{1}{8}$	$\frac{2}{15}$	$\frac{1}{6}$	$\frac{1}{4}$	$\frac{2}{5}$	$\frac{2}{3}$	$1\frac{1}{3}$	2	drops.
Apocynum Can., Fl. Ext. of.	$\frac{3}{16}$	$\frac{1}{15}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{5}$	1	2	3	"
Apomorphine, Hydrochlorate of.			$\frac{1}{100}$	$\frac{1}{45}$	$\frac{1}{30}$	$\frac{1}{20}$	$\frac{1}{15}$	$\frac{1}{10}$	gr.
Arsenic, Fowler's Solution of.	$\frac{3}{16}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{5}$	$1\frac{2}{3}$	2	3	drops.
Asclepias Syriaca, Fl. Ext. of.	1	2	3	4	6	10	20	30	"
Atropine, Sulphate of.			$\frac{1}{1200}$	$\frac{1}{500}$	$\frac{1}{300}$	$\frac{1}{200}$	$\frac{1}{150}$	$\frac{1}{100}$	gr.
Baptisia Tinctora, Fl. Ext. of.	$\frac{1}{8}$	$\frac{1}{7}$	$\frac{1}{6}$	$\frac{1}{4}$	$\frac{2}{5}$	$\frac{2}{3}$	$1\frac{1}{3}$	2	drops.

NAMES OF MEDICINES.	MONTHS.			YEARS.					THE AM'T
	Under 3	4 to 7	8 to 12	1 to 3	4 to 7	8 to 12	12 to 16	16 to 20	
Bayberry, Powdered.	1	$1\frac{1}{3}$	2	4	6	8	15	20	grs.
Bayberry, Fl. Ext. of.	1	$1\frac{1}{3}$	2	4	6	8	15	20	drops.
Bearsfoot, Fl. Ext. of.	$\frac{1}{2}$	1	$1\frac{1}{2}$	3	5	6	10	15	"
Belladonna, Fl. Ext. of.	$\frac{1}{18}$	$\frac{1}{15}$	$\frac{1}{12}$	$\frac{1}{8}$	$\frac{1}{6}$	$\frac{1}{3}$	$\frac{2}{3}$	1	"
Bismuth, Subnitrate of.	$\frac{1}{2}$	$\frac{2}{3}$	1	2	3	4	7	10	grs.
Buchu, Fl. Ext. of.	1	2	3	4	6	10	20	30	drops.
Cactus Grandiflorus, Fl. Ext. of. .	$\frac{1}{8}$	$\frac{2}{15}$	$\frac{1}{6}$	$\frac{1}{4}$	$\frac{2}{5}$	$\frac{2}{3}$	$1\frac{1}{3}$	2	"
Caffeine, Citrate of.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$3\frac{1}{2}$	5	grs.
Calcium, Sulphide of.	$\frac{1}{8}$	$\frac{2}{15}$	$\frac{1}{6}$	$\frac{1}{4}$	$\frac{2}{5}$	$\frac{2}{3}$	$1\frac{1}{3}$	2	"
Calomel.	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	1	1	1	1	1	gr.
Camphor, Spirits of.	1	$1\frac{1}{3}$	2	4	6	8	15	20	drops.
Camphor, Gum of.	$\frac{3}{16}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{5}$	1	2	3	grs.
Camphorated Tr. of Opium. . .	2	4	5	7	12	20	40	60	drops.
Cascara Sagrada, Fl. Ext. of. . .	1	2	3	4	6	10	20	30	"
Cerium, Oxalate of.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$3\frac{1}{2}$	5	grs.
Chimaphila, Fl. Ext. of.	1	2	3	4	6	10	20	30	drops.
Chionanthus Virgin., Fl. Ext. of. .	1	2	3	4	6	10	20	30	"
Cimicifuga, Fl. Ext. of.	$\frac{3}{4}$	1	$1\frac{1}{2}$	3	5	6	10	15	"
Chloroform, Spirits of.	1	2	3	4	6	10	20	30	"
Chloral, Hydrate of.	$\frac{1}{2}$	$\frac{2}{3}$	1	2	3	4	7	10	grs.
Cinchonedia, Sulphate of. . . .	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$3\frac{1}{2}$	5	"
Cinnamon, Spirits of.	1	2	3	6	10	12	20	30	drops.
Cocaine, Hydrochlorate.	$\frac{1}{30}$	$\frac{1}{18}$	$\frac{1}{8}$	$\frac{1}{5}$	$\frac{2}{5}$	$\frac{2}{3}$	$1\frac{1}{2}$	2	grs.
Codine, Hydrochlorate.	$\frac{1}{60}$	$\frac{1}{30}$	$\frac{1}{20}$	$\frac{1}{12}$	$\frac{1}{5}$	$\frac{1}{3}$	$\frac{2}{3}$	1	gr.
Colchicum Seed, Fl. Ext. of. . .	$\frac{3}{16}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{4}$	1	2	3	drops.
Colinsonia Canadensis, Fl. Ext. of.			1	2	3	4	7	10	"
Copaiba, Balsam of.	1	$1\frac{1}{2}$	2	3	5	8	15	20	grs.
Corn Silks, Fl. Ext. of.	2	4	6	12	20	24	40	60	drops.

NAMES OF MEDICINES.	MONTHS.			YEARS.					THE AM'T
	Under 3	4 to 7	8 to 12	1 to 3	4 to 7	8 to 12	12 to 16	16 to 20	
Cratægus Oxycantha, Fl. Ext. of	$\frac{1}{2}$	$\frac{2}{3}$	1	2	3	4	7	10	drops.
Cotton Root, Fl. Ext. of.						12	20	30	"
Damiana, Fl. Ext. of.					10	12	20	30	"
Digitalis, Fl. Ext. of.	$\frac{1}{16}$	$\frac{1}{15}$	$\frac{1}{12}$	$\frac{1}{8}$	$\frac{1}{5}$	$\frac{1}{3}$	$\frac{2}{3}$	1	"
Dioscorea Villosa, Fl. Ext. of.	1	2	3	6	10	12	20	30	"
Dover's Powder.					3	4	7	10	grs.
Droseria Rotundifolia, Fl. Ext. of.	$\frac{1}{2}$	$\frac{2}{3}$	1	2	3	4	7	10	drops.
Echinacea Angustifolia, Fl. Ext. of..	1	2	3	6	10	12	20	30	"
Elaterium.				$\frac{1}{35}$	$\frac{1}{25}$	$\frac{1}{20}$	$\frac{1}{16}$	$\frac{1}{12}$	gr.
Ergot, Fl. Ext. of.	1	2	3	6	10	12	20	30	drops.
Erigeron, Oil of.	$\frac{1}{2}$	$\frac{2}{3}$	1	2	3	4	7	10	"
Gelsemium, Fl. Ext. of.	$\frac{1}{8}$	$\frac{2}{15}$	$\frac{1}{6}$	$\frac{1}{4}$	$\frac{2}{5}$	$\frac{2}{3}$	$1\frac{1}{3}$	2	"
Gentian, Fl. Ext. of.	1	2	3	6	10	12	20	30	"
Geranium, Powdered.		$\frac{2}{3}$	1	2	3	4	7	10	grs.
Gold and Soda, Chloride of.					$\frac{1}{75}$	$\frac{1}{60}$	$\frac{1}{30}$	$\frac{1}{20}$	"
Gossypium, Fl. Ext. of.			3	6	10	12	20	30	drops.
Grindelia Robusta, Fl. Ext. of.	2	4	6	12	20	24	40	60	"
Grindelia Squarrosa, Fl. Ext. of..	1	2	3	6	10	12	20	30	"
Hair-Cap Moss, Fl. Ext. of.	1	2	3	6	10	12	20	30	"
Hamamelis Virginica, Fl. Ext. of.	1	2	3	6	10	12	20	30	"
Hydrastis Canadensis, Fl. Ext. of.	$\frac{3}{4}$	1	$1\frac{1}{2}$	3	5	6	10	15	"
Hydrangea, Fl. Ext. of.	1	2	3	6	10	12	20	30	"
Hydrargyri, Chloridum Mite.	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	1	1	1	1	1	gr.
Hydrargyri, Chloridum Corrosivum.			$\frac{1}{288}$	$\frac{1}{120}$	$\frac{1}{96}$	$\frac{1}{60}$	$\frac{1}{36}$	$\frac{1}{24}$	"
Hydrargyri, Iodum Rubrum.			$\frac{1}{192}$	$\frac{1}{80}$	$\frac{1}{64}$	$\frac{1}{36}$	$\frac{1}{24}$	$\frac{1}{16}$	"
Hypophosphite of Lime and Soda, Syr.	2	4	6	12	20	24	40	60	drops.
Hypophosphites of Lime and Soda.	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{2}{3}$	1	2	3	6	8	grs.
Iodine, Tr. of.	$\frac{1}{8}$	$\frac{2}{15}$	$\frac{1}{6}$	$\frac{1}{3}$	$\frac{3}{5}$	1	$1\frac{1}{3}$	2	drops.

NAMES OF MEDICINES.	MONTHS.			YEARS.					THE AM'T
	Under 3	4 to 7	8 to 12	1 to 3	4 to 7	8 to 12	12 to 16	16 to 20	
Iodoform.	$\frac{1}{8}$	$\frac{2}{15}$	$\frac{1}{6}$	$\frac{1}{3}$	$\frac{3}{5}$	1	$1\frac{1}{3}$	2	grs.
Ipecac, Powdered.	$\frac{1}{8}$	$\frac{2}{15}$	$\frac{1}{6}$	$\frac{1}{3}$	$\frac{3}{5}$	1	$1\frac{1}{3}$	2	"
Iron, Muriated Tr. of.	1	$1\frac{1}{2}$	2	3	5	7	14	20	drops.
Jaborandi, Fl. Ext. of.	1	2	3	6	10	12	20	30	"
Kino, Gum of.	1	$1\frac{1}{2}$	2	3	5	7	14	20	grs.
Laudanum.					3	5	10	15	drops.
Lavender, Compound Spirits of.	2	4	6	12	20	24	40	60	"
Leptandrin.	$\frac{1}{12}$	$\frac{1}{6}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{2}{5}$	$\frac{2}{3}$	$1\frac{1}{3}$	2	grs.
Lime-Water.	$\frac{1}{12}$	$\frac{1}{6}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{3}{4}$	1	oz.
Lithium, Benzoate of.	$\frac{1}{2}$	$\frac{2}{3}$	1	2	3	4	7	10	grs.
Lithium, Citrate of.	$\frac{1}{2}$	$\frac{2}{3}$	1	2	3	4	7	10	"
Lobelia, Tr. of.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{3}{4}$	1	2	3	4	drops.
Lupulin.	$\frac{1}{2}$	$\frac{2}{3}$	1	2	3	4	7	10	grs.
Magnesia, Carbonate of.	1	2	3	6	10	12	20	30	"
Mercury, Mild Chloride.	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	1	1	1	1	1	"
Mercury, Bichloride of.			$\frac{1}{288}$	$\frac{1}{120}$	$\frac{1}{96}$	$\frac{1}{60}$	$\frac{1}{36}$	$\frac{1}{24}$	"
Mercury, Biniodide.	$\frac{1}{250}$	$\frac{1}{200}$	$\frac{1}{192}$	$\frac{1}{80}$	$\frac{1}{64}$	$\frac{1}{36}$	$\frac{1}{24}$	$\frac{1}{16}$	"
Mint, Spirits of.	1	$1\frac{1}{2}$	2	3	5	7	14	20	drops.
Monrel's Solution of Iron.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$3\frac{1}{2}$	5	"
Morphine, Sulphate of.			$\frac{1}{75}$	$\frac{1}{30}$	$\frac{1}{24}$	$\frac{1}{12}$	$\frac{1}{6}$	$\frac{1}{4}$	gr.
Muriatic Acid.	$\frac{1}{6}$	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{2}{3}$	1	$1\frac{1}{2}$	2	3	drops.
Myrica Cerifera, Powdered.	$\frac{2}{3}$	$1\frac{1}{3}$	2	4	6	8	14	20	grs.
Myrica Cerifera, Fl. Ext. of.	$\frac{2}{3}$	$1\frac{1}{3}$	2	4	6	8	14	20	drops.
Niter, Sweet Spirits of.	1	2	3	6	10	12	20	30	"
Nitrate of Silver.	$\frac{1}{48}$	$\frac{1}{36}$	$\frac{1}{24}$	$\frac{1}{10}$	$\frac{1}{8}$	$\frac{1}{5}$	$\frac{1}{3}$	$\frac{1}{2}$	grs.
Naphthalin.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{3}{4}$	1	2	3	4	"
Nux Vomica, Fl. Ext. of.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{3}{4}$	1	2	3	4	drops.
Oil, Castor.	$\frac{1}{4}$	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	3	$3\frac{1}{2}$	4	drms.

NAMES OF MEDICINES.	MONTHS.			YEARS.					THE AM'T
	Under 3	4 to 7	8 to 12	1 to 3	4 to 7	8 to 12	12 to 16	16 to 20	
Oil, Cod Liver.	$\frac{1}{4}$	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	3	$3\frac{1}{2}$	4	drms.
Oil, Erigeron Canadensis.	$\frac{1}{2}$	$\frac{2}{3}$	1	2	3	4	7	10	drops.
Opium, Gum.				$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{3}{4}$	1	gr.
Paregoric.	2	4	5	7	12	20	40	60	drops.
Pennyroyal, Oil of.						4	7	10	"
Pepsin.	$\frac{1}{2}$	$\frac{2}{3}$	1	2	3	4	7	10	grs.
Phytolacca Decandra, Fl. Ext. of.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{3}{4}$	1	2	3	4	drops.
Pilocarpine, Hydrochlorate of.			$\frac{1}{36}$	$\frac{1}{20}$	$\frac{1}{12}$	$\frac{1}{7}$	$\frac{2}{9}$	$\frac{1}{3}$	gr.
Pinus Canadensis, Fl. Ext. of.	1	2	3	6	10	12	20	30	drops.
Pipsissewa, Fl. Ext. of.	1	2	3	6	10	12	20	30	"
Podophyllin.	$\frac{1}{16}$	$\frac{1}{12}$	$\frac{1}{8}$	$\frac{1}{5}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{3}{4}$	1	gr.
Polymnia Uvedalia, Fl. Ext. of.	$\frac{1}{2}$	1	$1\frac{1}{2}$	3	5	6	10	15	drops.
Potash, Acetate of.	1	$1\frac{1}{2}$	2	3	5	7	14	20	grs.
Potash, Bromide of.	1	$1\frac{1}{2}$	2	3	5	7	14	20	"
Potash, Iodide of.	$\frac{1}{3}$	$\frac{2}{3}$	1	$1\frac{1}{2}$	$2\frac{1}{2}$	$3\frac{1}{2}$	7	10	"
Potash, Permanganate of.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{3}{4}$	1	2	3	4	"
Powder, Dover's.				$\frac{1}{2}$	2	3	7	10	"
Prunus Virginiana, Syrup of.	3	4	5	7	12	20	40	60	drops.
Pulsatilla, Fl. Ext. of.	$\frac{1}{4}$	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	3	$3\frac{1}{2}$	4	"
Quinidine, Alkaloid.	$\frac{1}{3}$	$\frac{1}{2}$	1	2	$2\frac{1}{2}$	$3\frac{1}{2}$	4	5	grs.
Quinine, Sulphate of.	$\frac{1}{3}$	$\frac{1}{2}$	1	2	$2\frac{1}{2}$	$3\frac{1}{2}$	4	5	"
Rhus Aromatica, Fl. Ext. of.	1	2	3	6	10	12	20	30	drops.
Salts, Epsom.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{3}{4}$	1	2	3	4	drms.
Sanguinaria Canadensis, Fl. Ext. of.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{3}{4}$	1	2	3	4	drops.
Santonine.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{3}{4}$	1	2	3	4	grs.
Soda, Phosphate of.	3	4	5	7	12	20	40	60	"
Soda, Salicylate of.	$\frac{1}{2}$	$\frac{2}{3}$	1	2	3	4	7	10	"
Soda, Sulphite of.	1	$1\frac{1}{2}$	2	3	5	7	14	20	"

NAMES OF MEDICINES.	MONTHS.			YEARS.					THE AM'T
	Under 3	4 to 7	8 to 12	1 to 3	4 to 7	8 to 12	12 to 16	16 to 20	
Solution, Fowler's.	$\frac{1}{6}$	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{2}{3}$	1	$1\frac{1}{2}$	2	3	drops.
Sparteine, Sulphate of.	$\frac{1}{80}$	$\frac{1}{64}$	$\frac{1}{48}$	$\frac{1}{28}$	$\frac{1}{16}$	$\frac{1}{8}$	$\frac{1}{6}$	$\frac{1}{4}$	gr.
Squill, Fl. Ext. of.	$\frac{1}{6}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{5}$	1	2	3	drops.
Squill, Syrup of.	3	4	6	12	20	24	40	60	"
Stillingia, Compound Syrup of.	3	4	6	12	20	24	40	60	"
Sulphide of Calcium.	$\frac{1}{100}$	$\frac{1}{90}$	$\frac{1}{80}$	$\frac{1}{40}$	$\frac{1}{20}$	$\frac{1}{16}$	$\frac{1}{10}$	$\frac{1}{8}$	gr.
Strychnine, Sulphate of.			$\frac{1}{384}$	$\frac{1}{160}$	$\frac{1}{128}$	$\frac{1}{96}$	$\frac{1}{48}$	$\frac{1}{32}$	"
Strychnine, Nitrate of.			$\frac{1}{384}$	$\frac{1}{160}$	$\frac{1}{128}$	$\frac{1}{96}$	$\frac{1}{48}$	$\frac{1}{32}$	"
Tannic Acid.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$3\frac{1}{2}$	5	grs.
Turpentine, Spirits of.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	1	2	$2\frac{1}{2}$	3	4	drops.
Tolu, Syrup of.	3	4	6	12	20	24	40	60	"
Veratrum Viride, Tr. of.	$\frac{1}{16}$	$\frac{1}{12}$	$\frac{1}{8}$	$\frac{1}{5}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{3}{4}$	1	"
Vitriol, Elixir of.	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	4	6	10	16	"
Wild Cherry, Syrup of.	3	4	6	12	20	24	40	60	"
Xanthoxylum, Fl. Ext. of.	1	2	3	6	10	12	20	30	"
Zinc, Oxide of.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	1	2	$2\frac{1}{2}$	3	4	grs.
Zinc, Sulphocarbolate of.	$\frac{1}{6}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{3}{5}$	1	$1\frac{1}{2}$	2	3	"

WHITE LINIMENT.

Acetic Acid,.....12 ounces,
Spirits of Turpentine,.....12 ounces,
Eggs, thoroughly beaten,.....2.

Mix and shake the mixture briskly a few minutes. This is a valuable liniment and may be used in all cases where such applications are desired. It is a very efficient counter-irritant when applied by means of a cloth saturated with it.

COMPOUND STILLINGIA LINIMENT.

Oil of Stillingia,.....1 ounce,
Oil of Cajeput,..... $\frac{1}{2}$ ounce,
Oil of Lobelia,.....2 drachms,
Alcohol,.....2 ounces.

Mix. This forms a peculiar form of liniment, possessing stimulant and relaxant properties. It is used in chronic asthma, croup, epilepsy, chorea, etc. In asthma and croup, the throat, chest and neck should be bathed with it three or four times a day. In chorea, epilepsy, etc., the whole spinal column should be bathed with it. In-rheumatism, sprains, etc., the diseased parts should be bathed with it.

HAIR RESTORATIVE.

Milk of Sulphur,.....2 drachms,
Sugar of Lead,.....1 drachm,
Glycerine,.....2 drachms,
Rose-Water, sufficient to make,.....8 ounces.

Mix and use as a hair dressing once or twice a day. It causes the hair to turn dark.

CANCER PASTE.

The following is the prescription used by the majority of the so-called cancer doctors:

Powd. Sanguinaria Canadensis, 1 drachm,

Powd. Galangal Root, 3 drachms.

Mix thoroughly and gradually add Chloride of Zinc until a thick paste is formed. Shape a piece of this paste, one-fourth of an inch thick, so that it will cover the sore and extend over the edges about the eighth of an inch, then, apply the paste retaining it in place with adhesive plaster. After the paste and adhesive strips are in place cover them with absorbent cotton, which should be retained in place with a well fitting bandage. Let the paste remain on the sore for twenty-four hours, when, a fresh plaster should be applied and thus continued for three days, when, soft poultices should be applied until the slough separates, when, the sore may be treated as a simple ulcer.

INDEX.

	Page
Abortion,	474
Absent Menstruation,.....	460
Abscess, Perityphilitic,.....	283
Acetanilide,	497
Acetate of Potash,.....	524
Acid, Benzoic,	366
“ Carbolic,	527
“ Hydrochloric,	529
“ Tannic,	532
“ Boracic,	530
Acites,	211
Aconite,	495
Aconitum Napellus,	495
Acute Articular Rheumatism,.....	432
“ Albuminuria,	345
“ Bright's Disease,.....	345
“ Bronchitis,	134
“ Cystitis,	363
“ Inflammation of the Bladder,.....	363
“ Gastritis,	238
“ Inflammation of the Heart,	178
“ “ “ “ Kidneys,	338
“ “ “ “ Larynx,	120
“ “ “ “ Stomach,.....	238

	Page
Acute Laryngitis,	120
" Myocarditis,	178
" Nasal Catarrh,	107
" Pharyngitis,	116
" Peritonitis,	313
" Sore Throat,	116
After-pains,	485
Ague Cake,	30, 332
Albuminuria, Acute,	345
" Chronic,	349
Alcohol,	502
Amenorrhœa,	460
American Hellebore,	494
Ammonia, Bromide of,	497
Ammonii Chloridum,	541
Amyl Nitrite,	500
Anasarca,	213
Anal Fissure,	296
Aneurism,	196
Angina Pectoris,	193
Anthrax,	447
Aphonia,	127
Aphthæ,	218
Apocynum Cannabinum,	522
Apoplexy,	399
Apothecaries' Liquid Measure,	493
" Weight,	493
Appendicitis,	283

Page

Apparatus, The Urinary,.....	335
Argentum,	532
Arbor Vitæ,.....	518
Arsenicum,	504
Arsenic,	504
Aromatic Spirits of Ammonia,.....	501
Asclepias Syriaca,.....	523
Asthma,	142
Ataxia, Locomotor,.....	406
Auri et Sodii Chloridum,.....	517
Balanitis,	373
Barosma Betulina,.....	521
Balsam of Copaiba,.....	523
Baptisia Tinctoria,.....	525
Bayberry Bark,.....	534
Bearsfoot,	543
Belladonna,	498
Bichloride of Mercury,.....	511
Big Neck,	215
Biliary Calculi,.....	324
Bilious Fever,.....	34
Biliousness,	318
Biniodide of Mercury,.....	513
Bismuthi Subnitras,.....	531
Bites and Stings, Poisonous,.....	427
Black Cohosh,.....	517
Black Haw,.....	518
Bladder, Acute Inflammation of,.....	363

	Page
Bladder, Chronic Inflammation of,.....	365
" Stone in,.....	368
Blood Poisoning,.....	201
Blue Cohosh,	518
Blue Stone,	533
Blue Vitriol,	533
Boils,	446
Boracic Acid,.....	530
Bowels, After Delivery,.....	485
Brain, Congestion of,	12
" " Active,.....	12
" " Passive,.....	12
" Dropsy of,.....	206
Breast, Infants', Care of,.....	487
Break-bone Fever,.....	90
Bright's Disease, Acute,	345
" " Chronic,	349
Bronchial Catarrh,	134
Bronchitis, Acute,.....	134
" Chronic,	138
Bromide of Ammonium,	497
" " Calcium,	497
" " Lithium,	497
" " Potassium,	496
Bromide of Sodium,	497
" " Zinc,	497
Buchu,	521
Burns and Scalds,.....	453

	Page
Cactus Grandiflorus,.....	498
Cadmium, Sulphate of,.....	535
Cæcum, Inflammation of,.....	281
Caffeine, Citrate of,.....	501
Calcium, Sulphide of,.....	515
Calculus, Vesical,.....	368
Calculi, Renal,.....	358
Calomel,	510
Calx Sulphurata,.....	515
Camphor,	501
Camphorated Oil,.....	527
Cancer of the Stomach,.....	246
" Paste,	554
Canadian Hemp,.....	522
Capsicum,	502
Carbolic Acid,	527
Carbuncle,	447
Carditis, Acute,	178
" Chronic,	179
Care of the Infant,.....	486
Catarrh, Acute Nasal,	107
" Chronic " 	109
Catarrhal Enteritis,	275
Caulophyllum,	518
Cephalalgia,	423
Cerebral Hemorrhage,.....	399
Chancroid,	392
Change of Life,.....	465

	Page
Child Birth,.....	475
Chimaphila,	522
Chionanthus Virginica,.....	509
Chills and Fever,.....	23
Chills, Chronic,.....	27
Chicken Pox,.....	84
Chloral Hydrate,.....	539
Chloride of Ammonia,	541
" " Gold and Soda,.....	517
Chloroform,	542
Chlorosis,	467
Cholera,	270
" Infantum,.....	266
" Morbus,	263
Chorea,	410
Chronic Albuminuria,	349
" Articular Rheumatism,	435
" Bright's Disease,	349
" Bronchitis,	138
" Constipation,	258
" Diarrhoea,	279
" Enteritis,	279
" Gastritis,	240
" Inflammation of the Kidneys,	349
" Intermittent,.....	27
" Laryngitis,	123
" Malaria,	27
" Nasal Catarrh,	109

	Page
Chronic Nephritis,	341
" Peritonitis,	317
Cimicifuga,	517
Cinnamon,	519
Cirrhosis of the Liver,	323
Cistitis, Acute,	363
" Chronic,	365
Citrate of Caffeine,	501
C'app,	381
Clavus,	451
Cocainæ Hydrochlorate,	542
Cod Liver Oil,	506
Codeine,	539
Colic,	255
" Hepatic,	324
" Lead,	257
" Painter's,	257
" Renal,	358
Colica Pictonum,	257
Colinsonia Canadensis,	508
Compound Syrup of Stillingia,	514
" Stillingia Liniment,	553
Congestion of the Brain, Active,	12
" " " " Passive,	12
Congestive Chill,	32
" Intermittent,	32
Conjunctivitis,	456
Consumption,	160

	Page
Convulsions, Infantile,	420
Corn,	451
" Silk,	523
Cratægus Oxycantha,	508
Crisis,	7
Croup,	128
" Membranous,	130
Croupous Laryngitis,	130
Cupri Sulph.,	533
Cuts,	455
Damiana,	508
Dance, St. Vitus',	410
Dengue,	90
Delivery, Treatment After,	484
Diabetes, Insipitus,	354
" Mellitus,	355
Diarrhœa,	259
Digitalis,	497
Dilatation of the Heart,	187
Diphtheria,	100
Disease, Defined,	7
" Contagious,	7
" Functional,	7
" Infectious,	7
" Organic,	7
" Periodic,	17
" The Yellow,	38
Diseases of the Heart, Valvular,	182

	Page
Diseases of the Digestive Apparatus,	217
" " " Nervous System,	395
" " Pregnancy,	473
" " the Respiratory Apparatus,	107
" " Women,	459
Dizziness,	408
Dover's Powder,	538
Dropsy,	205
" of the Abdomen,	211
" " " Brain,	206
" " " Chest,	210
" " " Heart,	208
" " " Scrotum,	212
" General,	213
Drugs, Reliable,	494
Dysmenorrhœa,	463
Dysentery,	285
Dyspepsia,	250
" Intestinal,	253
Dysuria,	370
Ear-ache,	452
Echinacea Angustifolia,	525
Eczema,	442
Emphysema,	171
Endocarditis,	177
Enlargement of the Heart,	185
Enlarged Veins,	200
Enlargement of the Spleen,	30, 332

	Page
Enteritis, Catarrhal,	275
“ Chronic,	279
Enuresis,	369
Epilepsy,	412
Epistaxis,	160
Epsom Salts,	544
Ergota,	519
Ergot,	519
Eruptive Fevers,	67
Erysipelas,	85
Falling of the Womb,	472
Famine Fever,	63
Fatty Degeneration of the Heart,	189
Feeding, Infant,	487
Febricula,	42
Felon,	449
Fever, Bilious,	34
“ Break-bone,	90
“ General Treatment of,	22
“ Intermittent,	23
“ Irritative,	42
“ Jail,	63
“ Lung,	146
“ Milk,	485
“ Mountain,	67
“ Remedies,	10
“ Remittent,	34
“ Scarlet,	68

	Page
Fever, Ship,	63
“ Slow,	44
“ Spotted,	95
“ Swamp,	23
“ Typhoid,	44
“ Typhus,	63
“ Yellow,	57
“ Winter,	146
Fevers,	21
“ Eruptive,	67
Fistula In Ano,	299
“ of the Anus,	299
Fissured Nipples,	485
Flexion of the Womb,	472
Flux,	285
Follicular Stomatitis,	218
Fox-glove,	497
Fragrant Sumach,	521
Fringe Tree,	509
Furuncle,	446
Gangrenous Inflammation of the Mouth,	222
“ Stomatitis,	222
Gall-stones,	324
Gastritis, Acute,	238
“ Chronic,	240
“ Subacute,	235
Gastric Catarrh,	240
“ Ulcer,	244

	Page
Gastric Carcinoma,	246
Gastralgia,	254
General Dropsy,	213
Gelsemium,	495
Gentian,	506
Gin-drinkers' Liver,	323
Gleet,	385
Glonoïn,	500
Glossitis,	225
Goitre,	215
Golden Seal,	505
Gonorrhœa,	381
Gossypium,	519
Gout,	439
Gravel,	358
Green Sickness,	467
Grindelia Robusta,	542
" Squarrosa,	543
Hæmaturia, Malarial,	38
Hæmatemesis,	249
Hæmoptysis,	158
Hæmorrhoids,	293
Hair-cap Moss,	521
Hair Restorative,	553
Hamamelis,	536
Hawthorn,	508
Headache,	423
Heart-burn in Pregnancy,	473

	Page
Heart, Dilatation of,	187
“ Dropsy of,	208
“ Enlargement of,	185
“ Fatty Degeneration of,	189
“ Irritable,	192
“ Neuralgia of,	193
“ Palpitation of,	192
Hellebore, American,	494
Hematuria,	362
Hemlock, Spruce,	536
Hemorrhage, Cerebral,	399
“ of the Lungs,	158
“ “ “ Nose,	160
“ “ “ Stomach,	249
“ “ “ Urinary Passages,	362
Hepatic Colic,	324
Hepatitis,	320
Hernia, Femoral,	301
“ Inguinal,	301
“ Reducible,	300
“ Strangulated,	300
“ Umbilical,	301
Herpes Zoster,	445
Hops,	509
Humulus Lupulus,	509
Hydrangea,	522
Hydrastis Canadensis,	505
Hydrate of Chloral,	539

	Page
Hydrargyrum,	509
Hydrargyri Chloridum Mite,	510
" Corrosivum,	511
" Iodidum Rubrum,	513
" Subsulphas Flavius,	514
Hypertrophy of the Spleen,	332
" " " " Treatment of,	302
Hyperæmia, Renal,	336
Hypodermic Syringe,	8
Hysteria,	414
Icterus,	327
Ileus,	305
Impotence,	376
Incised Wounds,	455
Incontinence of Urine,	369
Indigestion,	250
" Intestinal,	253
Infant, Care of,	486
" Feeding,	487
Infantile Convulsions,	420
Inflammation of the Cæcum,	281
" " " Bladder, Acute,	363
" " " " Chronic,	365
" " " Brain,	395
" " " Breasts,	488
" " " Heart, Acute,	178
" " " " Chronic,	179
" " " Kidneys, Acute,	338

	Page
Inflammation of the Larynx, Acute,	120
“ “ “ Liver, Acute,	320
“ “ “ Mouth,	217
“ “ “ “ Gangrenous,	222
“ “ “ “ Ulcerative,	220
“ “ “ Œsophagus,	231
“ “ “ Pancreas,	333
“ “ “ Pelvis of the Kidneys,	343
“ “ “ Peritoneum, Acute,	313
“ “ “ “ Chronic,	317
“ “ “ Pharynx,	116
“ “ “ Rectum,	290
“ “ “ Small Intestines,	75
“ “ “ Spleen, Acute,	330
“ “ “ “ Chronic,	30, 332
“ “ “ Stomach, Mild,	235
“ “ “ “ Acute,	238
“ “ “ “ Chronic,	240
“ “ “ Testicles,	374
“ “ “ Tongue,	225
“ “ “ Tonsils,	227
“ “ “ Vagina,	470
“ “ “ Veins,	198
“ “ “ Vulva,	471
Influenza,	112
Intestinal Colic,	255
“ Obstruction,	305
“ Worms,	307

	Page
Iodide of Potash,	514
Iodide,	516
Iodoform,	529
Ipecac,	541
Ischuria,	370
Irritable Heart,	192
Irritative Fever,	42
Irritation of the Stomach,	242
Iron, Tr. of,	507
Itch,	450
Jaborandi,	524
Jail Fever,	63
Jaundice,	327
Kidneys, Congestion of,	336
" Acute Inflammation of,	338
" Chronic " " 	341
King's Evil,	430
Labor,	475
" Management of,	479
La Grippe,	112
Laryngitis, Acute,	120
" Chronic,	123
" Croupous,	130
" Spasmodic,	128
Large Round Worms,	309
Laudanum,	538
Lead Colic,	257
Leucorrhœa,	468

	Page
Liniment, Compound Stillingia,	553
" White,	553
Lithii Citras,	524
Lithium, Bromide of,	497
Liver, Congestion of,	318
" Cirrhosis of,	323
" Gin-drinkers',	323
" Inflammation of,	320
Lobelia,	539
Lock-jaw,	416
Locomotor Ataxia,	406
Looseness of the Bowels,	259
Loss of Voice,	127
Lysis,	7
Magnesia Sulphate,	544
Malarial Fever,	34
" Hæmaturia,	38
Malaria, Pernicious,	32
Management of Labor,	479
Mastitis,	488
Masturbation,	380
Materia Medica,	489
Measles,	74
" German,	76
Membranous Croup,	130
Meningitis,	395
" Epidemic Cerebro Spinal,	95
" Spinal,	402

	Page
Menorrhagia,	464
Menopause, The,	465
Menstruation,	459
" Absent,	460
" Painful,	463
" Profuse,	464
" Suppressed,	460
Mercury,	509
Metric System,	493
Milk Fever,	485
Ministers' Sore Throat,	123
Miscellaneous Diseases,	427
Morning Sickness,	473
Morphine Sulphate,	537
Mountain Fever,	67
Mountain Sickness,	67
Muco-Enteritis,	275
Mumps,	93
Muriatic Acid,	529
Muscular Rheumatism,	437
Myocarditis, Acute,	178
" Chronic,	179
Myrica Cerifera,	534
Naphthalin,	526
Nephritis, Acute,	338
" Chronic,	341
Neuralgia,	422
" of the Heart,	193

	Page
Neuralgia of the Stomach,	254
Nettle Rash,	441
Nipples, Fissured,	485
Nitrite of Amyl,	500
Nitroglycerine,	500
Nux Vomica,	505
Œsophagitis,	231
Œsophagus, Stricture of,	233
Obstruction, Intestinal,	305
Odontalgia,	424
Oil, Castor,	544
“ Cod Liver,	506
Oleum Ricini,	544
Opium,	536
Orchitis,	374
Otalgia,	452
Otorrhœa,	453
Oxide of Zinc,	535
Oxyuris Vermicularis,	311
Pain,	17
Painful Menstruation,	463
Painters' Colic,	257
Palpitation of the Heart,	192
Pancreas, The,	333
Pancreatitis,	333
Paralysis,	418
Paraphimosis,	372
Parasites, Intestinal,	307

	Page
Paregoric,	538
Pasque Flower,	518
Paste, Cancer,	554
Part I.,	7
“ II.,	21
“ III.,	107
“ IV.,	173
“ V.,	217
“ VI.,	335
“ VII.,	395
“ VIII.,	427
“ IX.,	459
“ X.,	489
Parturition,	475
Parotitis,	93
Pathology,	7
Pennyroyal,	519
Pepper, Cayenne,	502
Pericarditis,	173
Periodic Diseases,	17
Perityphlitis,	283
Perityphlitic Abscess,	283
Peritonitis, Acute,	313
“ Chronic,	317
Pertussis,	133
Pharyngitis, Acute,	116
“ Chronic,	118
Phimosiis,	371

	Page
Phlebitis,	198
Phosphorus,	506
Phrenitis,	395
Phthisic,	142
Phthisis Pulmonalis,	160
Phytolacca Decandra,	516
Piles,	293
Pin-worms,	311
Pilocarpus,	524
Pinus Canadensis,	536
Pipsissewa,	522
Pleurisy,	154
Pleuritis,	154
Pleuro-pneumonia,	148
Pneumonia,	146
" Typhoid,	148
Poisons and Antidotes,	544
Poisonous Bites and Stings,	427
Poisoning, Blood,	201
" Uræmic,	360
Poke Root,	516
Polymnia Uvedalia,	543
Polytrichum,	521
Potash, Acetate,	524
" Bromide of,	496
" Iodide of,	514
Pox,	386
Pregnancy, Signs of,	472

	Page
Pregnancy, Diseases of,	473
Proctitis,	290
Profuse Menstruation,	464
Prolapsus, Ani,	298
" of the Womb,	472
Protrusion of the Rectum,	298
Pruritus Vulvæ,	471
Pulsatilla,	518
Pulse, The,	9
Pulvis Ipecacuanhæ et Opii,	538
Pyelitis,	343
Quicksilver,	509
Quinidine,	503
Quinine Sulphate,	503
Quinine,	503
Quinsy,	227
Recapitulation,	18
Reliable Drugs,	494
Rectum, Protrusion of,	298
Renal Colic,	358
Retention of Urine,	370
Rheumatism,	432
" Acute Articular,	432
" Chronic "	435
" Muscular,	437
Rhus Aromatica,	521
Ring-worm,	444
Rotheln,	76

	Page
Rubeola,	74
Running from Ears,	453
Rupture,	300
" Reducible,	300
" Strangulated,	300
" Inguinal,	301
" Femoral,	301
" Umbilical,	301
Salol,	526
Salts,	544
Salt Rheum,	442
Scabies,	450
Scalds,	453
Scarlatina,	68
Scarlet Fever,	68
Scrofula,	430
Scrotum, Dropsy of,	212
Self Abuse,	380
" Pollution,	380
Septicæmia,	201
Shingles,	445
Ship Fever,	63
Sickness, Morning,	473
" Mountain,	67
Signs of Pregnancy,	472
Silk-weed,	523
Silver,	532
Slow Fever,	44

	Page
Small-Pox,	77
Sodium, Bromide of,	497
Soft Chancre,	392
Sore Eyes,	456
" Throat, Acute,	116
" " Chronic,	118
" " Ministers',	123
Spasmodic Laryngitis,	128
Spasms, Infantile,	420
Sparteine Sulphate,	500
Spermatorrhœa,	378
Spirits of Ammonia, Aromatic,	501
" " Chloroform,	542
" " Turpentine,	528
Splenitis, Acute,	330
Spleen, Enlargement of,	30, 332
Spinal Irritation,	404
" Meningitis,	402
Spotted Fever,	95
St. Anthony's Fire,	85
St. Vitus' Dance,	410
Stigmata Maydis,	523
Stillingia, Compound Syrup of,	514
Stings, Poisonous,	427
Stomach, Cancer of,	246
" Hemorrhage From,	249
" Neuralgia of,	254
" Ulceration of,	244

	Page
Stomatitis,	217
" Gangrenous,	222
" Ulcerative,	220
Stone in the Bladder,	368
" Root,	508
Strangury,	370
Stricture of the Œsophagus,	233
" " " Urethra,	373
Strychnine,	499
Subacute Gastritis,	235
Subnitrate of Bismuth,	531
Sugar of Lead,	531
Sulphate of Cadmium,	535
" " Calcium,	515
" " Morphine,	537
" " Quinine,	503
" " Sparteine,	500
" " Zinc,	535
Sulphide of Calcium,	515
Sulphite of Soda,	526
Sulphocarbolate of Zinc,	531
Sun-stroke,	408
Suppressed Menstruation,	460
Syphilis,	386
Syrup of Wild Cherry,	541
Table of Doses,	547
Tænia,	307
Tannic Acid,	532

	Page
Tape-worm,	307
Temperature, Normal,	9
Terebinthina,	528
Testicles, Inflammation of,	374
Tetanus,	416
Tetter,	442
The Bowels,	16
" Hypodermic Syringe,	8
" Menopause,	465
" Metric System,	493
" Pulse,	9
" Tongue,	15
" Urinary Apparatus,	335
" Yellow Disease,	38
" Dose of Medicine,	547
Thermometer,	9
Thread-worms,	311
Thrush,	218
Thuja Occidentalis,	518
Tincture Muriate of Iron,	507
" of Opium,	538
" Opii Camphorata,	538
Tinea Circinata,	444
Tonics,	18
Tonsillitis,	227
Tongue,	15
" Inflammation of,	225
Toothache,	424

	Page
Toothache, in Pregnancy,	473
Treatment after Delivery,	484
Trichina Spiralis,	312
True Croup,	130
Tuberculosis,	160
Turpeth Mineral,	514
Typhilitis,	281
Typhus Fever,	63
Ulcer, Gastric,	244
Ulcerative Stomatitis,	220
" Inflammation of the Mouth,	220
Ulceration of the Stomach,	244
Uræmia,	360
Uræmic Poisoning,	369
Urine, Incontinence of,	360
" Retention of,	370
Urethra, Stricture of,	373
Urticaria,	441
Vaccination,	83
Vagina, Inflammation of,	470
Vaginitis,	470
Valvular Diseases of the Heart,	182
Varicocele,	375
Varicosed Veins,	200
Varicella,	84
Variola,	77
Veins, Inflammation of,	198
" Varicosed,	200

	Page
Veratrum Viride,	494
Verruca,	451
Version of the Womb,	472
Vertigo,	408
Vesical Calculus,	368
Virburnum Prunifolium,	518
Voice, Loss of,	127
Vomiting,	242
" in Pregnancy,	473
Vulva, Itching of,	471
" Inflammation of,	471
Vulvitis,	471
Warts,	451
Whitlow,	449
Weight, Apothecaries',	493
Weights and Measures,	493
Whites,	468
Whiskey,	502
White Liniment,	553
Whooping Cough,	133
Wild Indigo,	525
Winter Fever,	146
Witch-hazel,	536
Worms, Intestinal,	307
Worm, Tape,	307
" Pin,	311
" Thread,	311
Wounds, Incised,	455

	Page
Yellow Fever,	57
“ Jack,	57
“ Jasmine,	495
Young's Rule in Determining the Dose,	547
Zinc, Bromide of,	497
“ Sulphate of,	535
“ Sulphocarbolate,	531
“ Oxide,	535

The Practice of Medicine

Price \$3.50

Agents Wanted

Address the Publishers, or

A. M. Nicks, M. D.,
Biggers, Ark.

APR 3 1907

LIBRARY OF CONGRESS



0 022 190 090 A